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METEOROLOGICAL DEPARTMENT

MAGNETIC, METEOROLOGICAL AND SEISMOGRAPHIC OBSERVATIONS

MADE AT THE

GOVERNMENT OBSERVATORIES,

BOMBAY AND ALIBAG,

IN THE YEAR

1928

UNDER THE DIRECTION OF

S. K. BANERJI, D.Sc.

WITH AN APPENDIX RELATING TO THE CLIMATOLOGY OF BOMBAY.

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INTRODUCTION.

This volume on the magnetic, meteorological and seismographic observations made at the Government Observatories, Bombay and Alibag, during the year 1928, has been prepared in the same form as the volume for the year 1927. The hourly values of all the important meteorological and magnetic elements have been given and these represent their average values over one hour and not their momentary values at the end of every hour. This volume is the fiftieth volume of its kind issued by the Observatory and extends the records of continuous meteorological and magnetic observations to a period of eighty-three years and of seismographic observations to a period of thirty years. The transference of magnetic work from Colaba to Alibag in 1904, due to the city of Bombay having decided to have electric tram service, caused a certain amount of discontinuity in the magnetic records, which had run uninterruptedly then at Colaba for about sixty years, but as comparative observations could be taken at both the stations for a period of two years before the electric tram lines were completed and the service had commenced its operations, the 'discontinuity' could be calculated and allowed for. The comparative observations show that at Alibag, the horizontal component of magnetic force stands lower by 0·00510 C. G. S. unit of force, easterly declination stands higher by 53'·5 and inclination stands higher by 1° 4'·7 than at Colaba, and these are the finally adopted differences between the two sites. The figures published in this volume, like those in the previous volumes since 1906, have not been corrected for these differences.

The Colaba Observatory is situated almost at the extreme south end of the narrow ridge of land extending about three miles to the south-west of the Fort of Bombay and separating the Harbour from the Back Bay. The level of the Observatory compound is about 32 feet above the mean level of the sea.

The astronomical co-ordinates* giving the position of the Colaba Observatory are :—

Latitude	..	..	..	..	18° 53′ 36·18″ N.
Longitude	..	..	..	..	72° 48′ 54·03″ E.

The Alibag Magnetic Observatory is situated on the main land about 18 miles south-south-east of Bombay, and its astronomical co-ordinates are—

Latitude	18° 38′ 17″ N.
Longitude	72° 52′ 21″ E.

For a general description of the buildings and instruments in both the Observatories, see "Magnetical, Meteorological and Seismographic Observations made at the Government Observatories, Bombay and Alibag, 1906 to 1910," and also the similar volume for 1916-20.

Unless otherwise stated, all times given in this volume refer to local mean time.

Climatology of Bombay.

The normal hourly values of the meteorological elements at Bombay based on the data furnished by self-recording instruments during the 25 years ending with 1897 were published in the form of an appendix to the volume "Magnetic, Meteorological and Seismographic Observations, 1898-1899". These meteorological normals have been recently revised and made to comprise all the data up to the year 1920. The revised normals are given in the appendix to this volume together with an introduction explaining the manner in which these have been obtained and also their essential features.

Meteorological instruments at Colaba.

1. *Standard Barometer.*—The barometer is by Newman (No. 58) and has been in uninterrupted use since the establishment of the Observatory. It reads on an average 0·004″ below the Kew Standard and 0·012″ below the old Calcutta standard barometer. The height of the barometer is 37 feet above the mean sea-level. A subsidiary standard barometer, Newman No. 48, has also been maintained in the underground constant temperature room, and its reading exceeds that of the standard barometer by 0·001″.

2. *Barograph.*—The instrument is of the Kew pattern and is installed in the underground constant temperature room and the variation of pressure is recorded photographically. The barograph has been treated, as in the past, as an independent instrument in respect of the variation of pressure occurring in the course of a day, but the mean of the excesses of the eye observations of the standard barometer made on any day, on the previous day and the succeeding day over the corresponding barograph tabulations has been applied as a common correction to all the tabulated hourly readings of the day.

3. *Standard Dry bulb and Wet bulb Thermometers.*—On the 26th November 1917, the freezing points were tested and the zero of the dry bulb standard thermometer No. 401 was

*Magnetic, Meteorological and Seismographic observations made at the Government Observatories, Bombay and Alibag, 1912, p. 1.

found to have changed from 32°·6 to 33°·0 F. and that of the wet bulb standard thermometer No. 402 from 32°·5 to 33°·0 F. These thermometers were again tested on the 3rd February 1926 and their corrections were found to be the same as those determined in 1917. Besides the above, there are eye reading dry bulb, wet bulb, maximum and minimum thermometers installed in a standard Stevenson Screen and a standard thatched shed. The heights of the bulbs of the thermometers above the ground in different sheds are given below :—

Thermograph Shed ; Dry bulb 10′ ; Wet bulb 10′.
Stevenson Screen ; „ „ 4′ 4½″ ; „ „ 4′ 4″ : Max 4′ 11½″ ; Min. 4′ 4″.
Thatched Shed ; „ „ 4′ 8″ ; „ „ 4′ 7½″ : „ 4′ 0½″ ; „ 3′ 8″.

For the results of comparative observations of these thermometers see p. 2 of the volume for the year 1924.

4. *Kew Dry bulb and Wet bulb Thermograph.*—The bulbs of these thermograph thermometers are placed close to those of the standard dry and wet bulb thermometers in a large double louvre shed, and the variation of temperatures is recorded photographically. The tables of air temperature have been obtained from the tabulations of dry bulb and of humidity from dry and wet bulb thermograms. The mean differences between the readings of the standard dry and wet bulb thermometers described in the preceding para. and the corresponding readings of the thermograms for the year 1928 were both +0°·1 and were neglected.

5. *Robinson-Beckley's Anemograph.*—This anemograph is of the kind designed by Robinson, with improvements by Robert Beckley. It is erected on the Anemometer Tower with its cups at a height of 58 feet above the ground and 100 feet above the mean sea-level. The centres of each pair of opposite hemi-spherical cups are four feet apart, and the diameter of each of the cups is 9 inches. The diameter of the vanes of the direction recorder is 15 inches and the breadth of the fans 4 inches.

6. *Dines' Anemograph, 1897 (velocity).*—The head-vane has been placed on the Anemometer Tower at a distance of 6 feet from the Robinson-Beckley's cups and 6 inches above their level. The comparison of this instrument with a U-tube pressure gauge, showed on the results of a series of experiments, that the relation between W, the difference in level of water in inches in the two arms of the U-tube, which is a measure of the pressure of wind, and V, the velocity of wind in miles per hour as indicated in the Dines' chart, was $W = \cdot 00078\ V^2$ instead of $W = \cdot 00073\ V^2$, which should have been the relation if the instrument had the correct specification of a standard instrument of this kind. The results showed that this Dines' instrument recorded only 96 per cent. of the true velocity.

The ordinary observations with this instrument were discontinued with effect from the 1st August 1928. It was converted into a quick-run instrument on the 20th August. The speed of the driving clock was increased three-fold, and the papers were consequently shifted thrice during 24 hours. The individual gusts at this speed of the driving clock just became separated from each other and the number of them in a certain interval could be counted easily. The records thus furnished very valuable information regarding gusts at Bombay.

7. *Dines' Anemograph, 1924 (velocity and direction).*—A Dines' anemograph by R. W. Munro and Co. was received in 1923 and installed on the Anemometer Tower in January 1924. With a view to get the best possible exposure, its modern type T-shaped head-vane was placed on the top of a telegraph post, 32·5 feet high, fixed on the Tower at a distance of 3 feet from the cups of the Robinson-Beckley's anemograph. The vane was therefore 27 feet above the level of Robinson-Beckley's cups and 127 feet above the mean sea-level. The diameter of the post near the Beckley's cups is 8 inches and it does not therefore exercise any appreciable influence on the records of Robinson-Beckley. This is due to the fact that in a current of air flowing past a fixed cylindrical obstacle, the stream lines, although they get deformed near the obstacle, assume again very nearly the original configuration at a distance from the obstacle equal to its diameter, and at this distance the velocity of the air current, too, attains its original value. The results of a series of comparisons of this instrument with a U-tube pressure-gauge showed that W, the difference in level of water in inches in the two arms of the U-tube, which is a measure of the pressure exerted by the wind, and V, the velocity of the wind in miles per hour as indicated in the charts, practically obey the standard law, namely, $W = \cdot 000731\ V^2$.

The height of the vane of this anemometer is 26 feet above that of the old Dines' anemometer. On account of this greater height, this instrument records a larger velocity of wind, and smaller gustiness; the types of records by the two instruments

are however identical. The following table gives the results of the comparative observations of the three wind instruments.

Ratio of Wind Velocities	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Means. October to February.	Means. March to May.	Means. June to September.	Means. Year.
New Dines to Old Dines (1924-29)	1·55	1·55	1·46	1·49	1·58	1·61	1·84	1·85	1·73	1·63	1·63	1·57	1·59	1·51	1·76	1·63
New Dines to Rob. Beckley. (1924-30)	1·44	1·45	1·36	1·36	1·42	1·47	1·74	1·74	1·64	1·51	1·55	1·46	1·48	1·39	1·51	1·51
Old Dines to Rob. Beckley. (1924-29)	0·95	0·94	0·95	0·94	0·97	0·95	0·95	0·96	0·95	0·94	0·96	0·94	0·95	0·95	0·95	0·95

The hourly values of wind velocity and wind direction tabulated in this volume represent the average of this Dines' records for periods of sixty minutes, from full hour to full hour of local mean time. The daily mean directions have been derived by converting the hourly velocities into N or S and E or W components and combining the mean components.

8. *Rain-gauge.*—Newman's rain-gauge, which has been in use since 1845, exposes for the collection of rain drops at a height of four feet above the ground a circular surface of an average diameter of 12·035 inches, forming the top of the funnel, which opens into a cylindrical vessel below, having a diameter of 5·732 inches. Each division of the graduated rod resting on the float represents ·05 inch of rain and the readings of this scale are easily estimated to one-fifth of a division.

9. *Photographic Rain-gauge.*—This instrument takes a continuous record of rainfall by photographing the head of a mercury column balancing the rainfall collected in a glass vessel, with an arrangement for syphon discharge when full. A full description of this instrument will be found in the introduction to the "Bombay Magnetical and Meteorological Observations, 1871 to 1878", page xlvi. For methods of reduction of pluviograph records, reference is made to the introduction to the "Bombay Magnetical, Meteorological and Seismographic Observations, 1916-20". The height of the receiving funnel of this instrument is 28 feet above the ground. On account of its greater height, the pluviograph gives a lower value for rainfall than that by Newman.

Magnetic Instruments at Alibag.

Variation Instruments.

The horizontal force, vertical force and declination magnetographs in use at Alibag are all by Watson and are mounted on isolated pillars in the magnetograph room. They were maintained in continuous action throughout the year. As explained on pages 1-2, of the observatory volume for 1927, the sensitiveness of the vertical force magnetograph was increased eightfold on the 7th August 1927, by introducing certain alterations in the mechanism for adjusting the position of the centre of gravity of the 'balance'. The instrument worked very satisfactorily throughout the year and furnished excellent records of the changes in the vertical force.

The maximum and minimum temperatures in the magnetograph room during 1928 are shown below in degrees Fahrenheit.

1928.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
	°	°	°	°	°	°	°	°	°	°	°	°	°
Maximum .	83·0	82·0	85·1	88·4	89·5	91·4	89·2	86·2	86·2	87·6	87·4	86·2	91·4
Minimum .	82·0	81·0	81·9	85·0	88·4	89·1	86·5	85·2	85·5	85·9	86·2	83·7	81·0

Two Eschenhagen variometers, one for horizontal force and the other for vertical force, are also installed in the magnetograph room and are read five times every day. A set of Kew Horizontal Force Magnetometer, Kew Vertical Force Magnetometer and

Declination Magnetometer is installed in the ground-floor room of the magnetometer building and these are also read five times every day. The eye observations are regularly plotted and are used mainly for a comparative study of the performance of the different instruments. The magnetograms have been used in deducing the tabulated results. The hourly tabulations represent the average values during one hour, centered at the full hours of Greenwich mean time.

The scale coefficients of the force magnetographs were obtained every fortnight from deflection observations performed on the instruments with deflectors, at distances of 100 cm. and 120 cm. in the case of H and at distances of 12 and 105 cm. and 148·6 cm. in the case of V magnetographs. The usual distribution coefficient $(1+\frac{p}{r^3})$ was introduced in the formula for the computation of scale coefficients. It was found that the mean values of the factor in the case of H.F. magnetograph were for both the distances equal to unity and in the case of V. F. magnetograph were 1·12 and 1·09 for the nearer and the longer distances respectively. The value of scale coefficient adopted for any month is the mean of the mean observed values for that month and for the preceding and succeeding months.

The following table gives the scale coefficients for 1 cm. ordinate on the photographic paper of the force magnetographs in γ, where as usual, γ = 0·00001 C. G. S. unit of force.

Instrument.	January.	February.	March.	April.	May.	June.	July.	August.	September	October.	November.	December.
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
H. F. Magnetograph	44·8	44·9	44·2	44·8	44·7	44·6	44·3	44·8	44·8	44·7	44·8	45·0
V. F. Magnetograph	10·9	10·9	11·2	11·6	11·9	11·8	11·6	11·1	10·9	11·1	11·2	11·1

The scale coefficient of the declination magnetograph for 1 cm. of ordinate is 10′·28.

The temperature co-efficient for the horizontal force magnetograph has been determined by heating experiments and its adopted value is ·000036 in C. G. S. unit for 1° F. The temperature co-efficient of the vertical force magnetograph was found by similar experiments to be negligible as no appreciable change in force, after allowing for the actual diurnal change, could be definitely ascertained as being due to temperature effect. The above conclusions have been checked by an analysis of the observed monthly values of base* lines by means of the formula $B_t = B_m + \alpha\ (t - m)$, where B_t is the monthly mean value of the base line, uncorrected for temperature but corrected for the slow secular change caused by the loss of magnetic moment and other causes, t the mean temperature during the month, B_m the annual mean of the observed values of the base line, m the annual mean temperature of the magnetograph room, and α the temperature co-efficient. Several years' data have been analysed in this manner. The mean value of α for H. F. based on the data for the years 1924-28 is ·000054 γ. The adopted value is thus seen to be smaller by about 33 per cent. than that obtained by this method, but no correction has been introduced in the reduction on account of this difference. For V. F. the value of α appears to be negligible.

Absolute Instruments.

Two magnetometers have been under regular observation during the period for obtaining the absolute values of horizontal force and declination. Magnetometer No. 7 by T. Cooke and Sons, which is the standard instrument at Alibag, is of the ordinary type of Kew pattern instruments but is modified and improved in several important details. The other instrument is Magnetometer No. 3 by the Cambridge Scientific Instrument Company and is of the usual Kew pattern. Instrument No. 7 is observed on the second floor of the magnetometer building, while instrument No. 3 is observed on the first floor, each instrument being permanently allowed to stand on its pillar in the respective floors. A third magnetometer No. 137 by A. Dover Charlton with magnets No. 3A and 3C received from Messrs. Casella and Co. in 1925 was brought into use from September 1925 for observations of horizontal force and declination mainly for comparative purposes. The observations were taken on the ground floor until February 1927 and afterwards on the top floor. These observations showed that magnets 3A and 3C were rapidly losing magnetism and consequently further observations with these magnets were stopped from 3rd December 1928 until such time as they become seasoned. Observations with the old magnets No. 3 and Magnetometer No. 3 were resumed on the top floor from the 3rd December, for comparative purposes.

*Memoirs of the Indian Meteorological Department, Vol. XXV, Part VII.

The value of the correction, $\text{Log.}_{10}\,(1+\frac{P}{r^2}+\frac{Q}{r^4})^{-1}$ used in the reduction of the horizontal force observations was obtained for a given month by taking the mean for seven months including the given month as fourth of the seven. The values of this correction for the different months of the year for the standard instrument at the deflection distance 22·5 cms. were as follows:—

January	.. 9·99331	May	.. 9·99339	September	.. 9·99342
February	.. 9·99333	June	.. 9·99337	October	.. 9·99339
March	.. 9·99339	July	.. 9·99336	November	.. 9·99336
April	.. 9·99334	August	.. 9·99342	December	.. 9·99330

Earth Inductor No. 41 by Schulze of Potsdam with galvanometer No. 200 by Plath are installed on specially constructed pillars in the second floor, while Inductor No. 108 by Otto Toepfer and its galvanometer are installed in the first floor of the magnetometer building. Both these instruments were in regular use.

System of observation at Colaba.

Eye observations of meteorological elements were taken every day, including Sundays, at the hours 8, 10, and 16; the day commencing at midnight, Bombay (Colaba), being reckoned from 0h to 24h. The time of observation of each element is fixed and the observations were registered with strict punctuality as follows:—

From 5 minutes to the hour to 2 minutes after the hour.	Extent and description of clouds, state of weather, occasional phenomena and direction of the wind.
At 2 minutes after the hour .	Thermograph standard thermometer, dry-bulb. Thermograph standard thermometer, wet-bulb.
At 3 minutes after the hour .	Newman's rain-gauge (in wet season).
From 7 to 9 minutes after the hour.	Newman's standard barometer No. 58 and attached thermometer. Newman's standard barometer No. 48 and attached thermometer (read at 10 hrs. and 16 hrs. only).
At 10 minutes after the hour .	Thermometer attached to barograph (read at 10 hrs. and 16 hrs. only).

Observations of the extent and description of clouds, state of weather, occasional phenomena and rainfall (in wet season) were also taken at 6, 14 and 22 hrs. Observations with nephoscope were taken at 8½, 12½ and 16½ hrs. every day. The maximum and minimum thermometers in the thermometer-sheds were read twice daily at 8 and 16 hrs.

During the monsoon months, Newman's rain-gauge was read daily at midnight in addition to the usual observations and the discharges of the syphon of the self-registering pluviograph were also read as often as required.

A Campbell-Stokes Sunshine recorder was installed on the balloon observation tower and was brought into regular use from August 1925.

The electric clock controlling the drop of the time ball and the Harbour clock, was duly regulated thrice every day by comparison with the standard sidereal clocks, two Riefler and one Kullberg. Government chronometers, belonging to the Royal Indian Marine and the Royal Navy, were wound daily or twice a week as required and comparisons with the standard clock were made with sufficient frequency to render the instruments always ready for issue at call with well determined rates.

Experience during the past few years showed that the time signals broadcasted from Nauen, Bordeaux and Rugby could be received at Bombay almost every day. Further observations of transits of stars were therefore no longer considered necessary. They were accordingly discontinued with effect from the 28th May. The two transit instruments in the Observatory, were, however, maintained in a condition so that they could be brought into use any time should the wireless signals fail to be received for any reason. Observations of rhythmic signal broadcasted from Nauen, Bordeaux and also the ordinary signals broadcasted from Calcutta were taken regularly during the year.

Observations of magnetic declination were made once every month at Colaba about the 15th of each month. The mean of the differences between the observed absolute values of declination at Colaba and Alibag, from 1906 to 1928, is 52′·9, and this agrees fairly well with the value obtained by the comparative observations taken at the two stations in the years, 1904 and 1905.

System of observation at Alibag.

Eye observations of the instruments mentioned below were taken daily, Sundays included, shortly before 6, 10, 14, 16 and 22 hrs. at the instants specified against them

These instants have been chosen so that they may approach as nearly as possible to the full hour of Greenwich mean time, which corresponds to 51 mins. of local time.

At	19	minutes	to the	hour	. Kew Horizontal Force Magnetometer and attached thermometer.
At	17	minutes	to the	hour	. Kew Vertical Force Magnetometer and attached thermometer.
,,	15	,,	,,	,,	. Declination Magnetometer and thermometer in the Magnetometer room.
,,	11	,,	,,	,,	. Eschenhagen's Vertical Force Variometer and attached thermometer.
,,	10	,,	,,	,,	. Watson's Vertical Force Magnetograph and attached thermometer.
,,	9	,,	,,	,,	. Watson's Declination Magnetograph.
,,	8	,,	,,	,,	. Watson's Horizontal Force Magnetograph and attached thermometer.
,,	7	,,	,,	,,	. Eschenhagen's Horizontal Force Variometer and attached thermometer.
,,	6	,,	,,	,,	. Thermograph and the standard thermometer in the Magnetograph room (read twice daily at 6 and 16 hrs. only).

Deflection experiments, with vibration magnet of magnetometer No. 137, the moment of which is determined every fortnight as deflector at distances of 100 cm. and 120 cm. on the horizontal force magnetograph and at distances of 124·05 cm. and 148·6 cm. on the vertical force magnetograph were made once every fortnight. Similar deflection experiments with vibration magnet of magnetometer No. 3 as deflector were made once a month for the purpose of check work.

Deflection experiments, with vibration magnet No. 137 as deflector at a distance of 100 cm. on the Eschenhagen horizontal force variometer, and at a distance of 75 cm. on the Eschenhagen vertical force variometer, were also made once a fortnight.

Observations of absolute horizontal force were made with the Observatory standard instrument No. 7 on Wednesdays. Observations of absolute horizontal force on alternate Mondays were also taken with —

(1) the auxiliary magnetometer No. 3 and magnets No. 137 throughout the year.

(2) and the auxiliary magnetometer No. 137 and the new magnets No. 3-A and 3-C received from Messrs. Casella and Co. till the 3rd December and thereafter with the auxiliary magnetometer No. 3 and magnets No. 3. With the standard magnetometer No. 7 and also with one of the auxiliary instruments mentioned above, taken alternately, observations of declination were made every Thursday one after the other. Observations of inclination were made with the Schulze's Inductor, which is the Observatory standard instrument, and another inductor by Otto Toepfer every day in the year with the exception of Sundays and holidays. Each of the two inductor instruments was ordinarily observed on alternate days, but for check work both the instruments were observed one after the other on Fridays. The check work consisted of a double set of comparative observations, the first set being taken in the morning and the second in the afternoon.

Transit observations of stars for the determination of time were made generally on Tuesdays and Fridays in the dry months; during the monsoon months no opportunity was lost of observing the sun or stars whenever visible. The adjustment of the transit instrument was frequently tested by reference to the fixed collimator mark and by level observations; the residual errors of collimation, level and azimuth were determined once every month except during the monsoon months.

For the comparative study of temperatures at Colaba and Alibag, the observations of the thermometers in the standard Stevenson Screen at Alibag were continued during the year at all the observational hours, namely 6, 10, 14, 16 and 22.

General Review.

1. *Weather.*—The southwest monsoon rains commenced at Bombay on the 9th June and practically ended on the 22nd September. The total rainfall recorded during the year amounted to 85·73″ and was 16·19″ above the normal of 72 years. The mean temperature of the year was 79°·9 which was 0°·6 above the normal. The greatest maximum temperature recorded was 92°·6 on the 7th June and the lowest minimum was 69°·6 on the 4th February. The mean temperature of all the months in the year was within 3° of the normal of the season. The mean velocity of wind during the year was 11·2 miles per hour. The greatest daily mean velocity was 25·9 miles per hour on the 20th July and the lowest was 5·4 miles per hour on the 23rd March. The greatest mean hourly velocity was 30 miles and this was attained both on the 21st July and the 29th August, while the velocity of a single gust of wind as recorded by the New Dines' anemometer reached 54 miles per hour on the 23rd July.

2. *Magnetic conditions.*—The mean and the extreme values of the magnetic elements at Alibag during 1928 are given below along with the corresponding values for the previous seven years :—

Year.	H						D						V						I
	Mean.	Maximum.		Minimum.		Absolute annual range.	Mean.	Maximum.		Minimum.		Absolute annual range.	Mean.	Maximum.		Minimum.		Absolute annual range.	Mean.
		Value.	Date.	Value.	Date.			Value.	Date.	Value.	Date.			Value.	Date.	Value.	Date.		
	γ	γ		γ		γ	′	′		′		′	γ	γ		γ		γ	° ′
1921	36935	37069	19th May.	36381	15th May.	688	15·9 E.	41·9 E.	15th May.	9·5 E.	7th July.	32·4	17257	17320	15th May	17144	20th Jan.	176	25 0·3
1922	36945	37037	10th Mar.	36777	14th Sept.	260	12·3 E.	18·0 E.	18th Feb.	6·6 E.	31st Aug.	11·4	17293	17351	12th Aug.	17222	5th Apr.	129	25 5·0
1923	36985	37071	27th Nov.	36554	24th Mar.	217	8·9 E.	13·6 E.	26th Jan.	3·6 E.	24th Sept.	10·0	17372	17432	3rd July.	17270	26th Jan.	162	25 9·6
1924	37029	37142	16th Sept.	36854	10th June	288	5·3 E.	10·5 E.	29th Jan.	0·4 E.	15th Sept.	10·1	17452	17514	20th Dec.	17379	19th Jan.	135	25 14·1
1925	37065	37170	9th Mar.	36899	28th Dec.	271	3·4 E.	8·2 E.	24th May	2·0 W.	4th Sept.	10·2	17527	17589	25th Dec.	17421	21st Jan.	168	25 16·5
1926	37079	37227	26th Jan.	36755	15th Apr.	472	0·8 E.	9·9 E.	15th Apr.	4·9 W.	24th Aug.	14·8	17590	17654	15th Oct.	17504	4th Jan.	150	25 22·7
1927	37119	37350	22nd Oct.	36802	12th Oct.	548	1·9 W.	6·0 E.	22nd July.	8·6 W.	21st Aug.	14·6	17650	17710	24th Sept.	17565	14th Sept.	145	25 25·9
1923	37152	37463	7th July	36718	8th July	745	9·8 W.	11·8 E.	8th July	9·0 W.	19th Sept.	20·8	17695	17778	29th May	17608	30th April	170	25 28·8

The value of H has been steadily increasing since 1916. The increase from 1927 to 1928 is 33γ and is very nearly equal to the average rate of increase, namely 28γ, during the last 10 years. Declination diminished during the year at a rate which is slightly smaller than the mean of the last ten years. Both the vertical force and the inclination showed, as usual, a gradual increase.

The following table gives the character figures assigned to each day according to the international scheme. In 1924, De Bilt issued a circular letter explaining a certain definite procedure to be followed in assigning a character figure to each day. The figures given below have consequently been deduced from a study of the departure of each day's range from the normal range for the day supplemented by an eye examination of the magnetograms.

Month.	"0" days.	"1" days.	"2" days.	Mean character figure.
1928.				
January	3, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 16, 17, 19, 21, 22, 31.	2, 4, 15, 18, 20, 23, 24, 25, 26, 29, 30.	1, 27, 28.	0·55
February	5, 6, 8, 9, 10, 11, 17, 24, 29,	1, 2, 3, 4, 7, 12, 14, 15, 16, 19, 20, 21, 22, 23, 25, 26, 27, 28.	13, 18.	0·76
March	1, 2, 3, 4, 5, 6, 7, 8, 9, 18, 19, 20, 21, 27, 28, 29, 30, 31.	10, 15, 16, 17, 22, 23, 24, 25, 26.	11, 12, 13, 14	0·55
April	11, 12, 13, 14, 17, 18, 22, 23, 24, 25, 26, 27, 28, 29, 30.	2, 4, 5, 6, 7, 8, 9, 10, 15, 16, 19, 20	1, 3, 21,	0·60
May	1, 3, 9, 20, 21, 22, 23, 25, 26,	4, 6, 7, 8, 9, 13, 14, 15, 16, 17, 18, 19, 24, 30, 31.	5, 10, 11, 12, 27, 28, 29.	0·94
June	10, 11, 17, 18, 19, 26, 27, 29,	1, 3, 4, 6, 8, 9, 14, 15, 16, 20, 21, 23, 24, 25, 28, 30.	2, 5, 7, 12, 13, 22.	0·93
July	1, 5, 12, 13, 14, 15, 16, 17, 18, 19, 20, 23, 24, 25, 29, 30.	3, 4, 6, 9, 10, 11, 21, 26, 27, 28.	2, 7, 8, 22, 31.	0·65
August	2, 3, 8, 9, 10, 11, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 24, 25, 29, 30, 31.	1, 4, 7, 12, 23, 28	5, 6, 26, 27.	0·45
September	1, 2, 12, 15, 16, 17, 21, 28.	4, 5, 6, 9, 10, 11, 13, 14, 20, 22, 23, 24, 26, 27, 29, 30.	3, 7, 8, 18, 19, 25.	0·93
October	4, 7, 8, 9, 12, 15, 28, 29, 31	1, 3, 6, 10, 11, 14, 17, 20, 21, 22, 23, 30.	2, 5, 13, 16, 18, 19, 24, 25, 26, 27.	1·03
November	5, 6, 7, 8, 9, 14, 20, 21, 22, 23, 25, 26, 27, 28, 29, 30.	1, 2, 11, 12, 18, 19, 24,	3, 4, 10, 13, 15, 16, 17.	0·70
December	3, 4, 9, 10, 15, 16, 17, 18, 19, 20, 23, 27, 30, 31.	1, 2, 7, 8, 11 12, 13, 14, 21, 22, 24, 25, 26, 28, 29.	5, 6.	0·61

The annual mean character figure, as assigned by the Observatory, to the year 1928 is ·73, while that assigned to the year 1927 is ·65. The corresponding De Bilt figures are ·65 and ·63 respectively. The magnetic activity in the year 1928 is slightly greater than that in the year 1927. October was the most active and August the most inactive month in the year.

Absolute observations and Base Line Values.

Declination.

Absolute observations of declination were made once a week on Thursdays with the standard magnetometer No. 7. For comparative purposes, an observation of declination was taken immediately afterwards with one of the auxiliary magnetometers, the magnetometer No. 3 and No. 137 being used in alternate weeks.

Base-line values are derived by converting the ordinates corresponding to absolute observations with instrument No. 7 into angles and subtracting the converted ordinates from the observed absolute declination. The values so obtained of the base-lines of the declination magnetograph denote westerly declination.

The adopted values are derived by taking overlapping means of 5 successive observations and reducing them to the proper epoch, values for intermediate days being obtained by simple interpolation.

Declination base-line values, 1928.

(0° *plus* tabular minutes.)

Date.	Observed.	Adopted.	Date.	Observed.	Adopted.	Date.	Observed.	Adopted.
	′	′		′	′		′	′
January 5	71·7 W	71·8 W	May 3	70·7 W	70·7 W	September 6	70·4 W	70·5 W
„ 12	72·0	71·9	„ 10	70·6	70·5	„ 13	70·9	70·7
„ 19	72·1	72·1	„ 17	70·2	70·3	„ 20	70·8	70·7
„ 26	72·4	72·3	„ 24	69·8	70·2	„ 27	70·9	70·8
February 2	72·3	72·4	„ 31	70·2	70·0	October 4	70·5	70·7
„ 9	72·6	72·5	June 7	70·1	70·0	„ 11	70·7	70·6
„ 16	72·8	72·6	„ 14	69·8	70·0	„ 18	70·3	70·6
„ 23	72·4	72·8	„ 21	69·9	69·9	„ 25	70·6	70·7
March 1	73·0	72·8	„ 28	69·9	69·9	November 1	70·9	70·6
„ 8	73·0	72·8	July 5	69·9	69·9	„ 8	70·8	70·7
„ 15	72·9	72·7	„ 12	69·7	69·8	„ 15	70·6	70·7
„ 22	72·5	72·4	„ 21	69·9	69·8	„ 22	70·7	70·8
„ 30	72·0	72·0	„ 27	69·6	69·8	„ 29	70·7	70·8
April 5	71·5	71·7	August 2	69·9	69·8	December 6	71·1	70·8
„ 12	71·2	71·4	„ 9	69·9	69·9	„ 13	70·8	70·9
„ 19	71·1	71·1	„ 16	69·9	70·1	„ 20	70·7	70·9
„ 26	70·9	70·9	„ 23	70·0	70·1	„ 27	70·9	70·9
			„ 30	70·6	70·4			

Horizontal Force.

Absolute observations of horizontal force were made twice a week, on Mondays with instrument No. 3 and No. 137 alternately and on Wednesdays with instrument No. 7. A day's observations comprise a double set of vibration and deflection experiments at three distances, which for No. 7 are 22·5 cm. 30 cm. and 40 cm. In calculating the base-line values the mean of the observed values at all the three distances has been used.

Base-line values are derived by converting the mean ordinates corresponding to absolute observations with instrument No. 7 in terms of γ and subtracting the converted ordinates from the mean observed absolute horizontal force. They are further reduced to a uniform temperature of 85° F. to make the series comparable from month to month and year to year.

The adopted values are derived by taking overlapping means of 5 successive double sets of observations and reducing them to the proper epoch, values for intermediate days being obtained by simple interpolation.

Horizontal force base-line values at 85° F. 1928.

Date.	Observed.	Adopted.	Date.	Observed.	Adopted.	Date.	Observed.	Adopted.
	γ	γ		γ	γ		γ	γ
January 4	36,858	36,861	May 2	36,877	36,874	September 5	36,858	36,858
,, 11	864	860	,, 9	871	875	,, 12	863	858
,, 18	862	860	,, 16	873	874	,, 19	861	859
,, 25	863	861	,, 23	881	872	,, 26	860	860
February 22	860	858	,, 30	866	871	October 3	862	860
,, 27	862	858	June 6	869	872	,, 10	863	864
,, 29	858	858	,, 13	868	871	,, 17	867	865
March 5	856	855	,, 20	877	873	,, 24	864	868
,, 7	862	854	,, 27	877	871	,, 31	863	870
,, 14	849	855	July 4	872	872	November 7	878	871
,, 21	862	856	,, 11	863	869	,, 14	871	871
,, 28	866	859	,, 18	871	865	,, 21	873	870
April 4	862	863	,, 25	861	867	,, 28	869	869
,, 11	863	868	August 1	858	867	December 5	860	867
,, 18	874	870	,, 8	881	865	,, 12	872	866
,, 25	873	872	,, 15	864	865	,, 19	869	866
			,, 22	862	865	,, 26	872	867
			,, 29	858	861			

Vertical Force.

Dip observations with inductors were made every day in the year, with the exception of Sundays and holidays, each of the two inductor instruments being observed on alternate days.

Base-line values are derived by expressing the mean ordinates of V. F. magnetograms corresponding to the inclination observations in terms of γ and subtracting the converted ordinates from the absolute vertical force obtained by multiplying the value of H. F. at the time by the tangent of inclination given by Inductor observations. Values derived from Inductor No. 108 are reduced to those derived from Inductor No. 41 (which is the Observatory standard) by applying the mean correction for the month deduced from the double set of comparative observations taken on Friday of every week.

The adopted values are derived by taking overlapping means of 7 successive observations and reducing them to the proper epoch, values for those days not given by this operation being obtained by interpolation.

The vertical force magnetograph was adjusted on the 6th January and 23rd December. As already remarked the sensitiveness of the instrument increased eight times in consequence of the change introduced on 7th August 1927 in the mechanism for altering the sensitiveness.

Vertical force base-line values, 1928.

Date.	Observed.	Adopted.	Date.	Observed.	Adopted.	Date.	Observed.	Adopted.
	Y	Y		Y	Y		Y	Y
January 4	17,577	17,582*	May 2	17,613	17,615	September 3	17,668	17,656
„ 11	17,651	17,638	„ 9	622	609	„ 12	673	654
„ 18	637	630	„ 16	591	596	„ 19	670	663
„ 25	631	629	„ 23	634	639	„ 26	667	667
February 22	648	646	„ 30	594	612	October 3	657	659
„ 27	682	663	June 6	617	617	„ 10	688	677
„ 29	683	665	„ 13	636	637	„ 17	717	686
March 5	697	674	„ 23	661	634	„ 24	702	689
„ 7	686	666	„ 27	629	605	„ 31	630	651
„ 14	651	647	July 4	634	624	November 7	599	595
„ 21	666	652	„ 11	649	627	„ 14	602	606
„ 28	637	639	„ 18	583	603	„ 21	611	613
April 4	664	644	„ 25	672	651	„ 28	592	595
„ 11	645	631	August 1	672	673	December 5	624	610
„ 18	623	612	„ 8	683	681	„ 12	608	611
„ 25	615	614	„ 15	673	673	„ 19	589	594*
			„ 22	662	670	„ 26	668	693
			„ 29	667	667			

* Adjustments of V. F. magnetograph.

Seismographs.

The Milne-Shaw Seismograph (N-S component), which was kept in continuous action in the underground constant temperature room, gave very satisfactory records of earthquakes and microseisms during the year. The earthquakes recorded by this instrument will be found tabulated towards the end of the volume. The locally constructed seismograph of Omori type (N-S and E-W components) was kept in continuous operation during the year as an auxiliary instrument. The Omori-Ewing Seismograph (E-W component) was maintained in good condition, but was not kept in continuous action throughout the year.

Magnetic Storms.

In plates I, II, III, IV and V are reproduced disturbed magnetic records for days recommended for publication by the International Commission of Terrestrial Magnetism. The base-line values and scale coefficients are shown with each curve. The hourly breaks last for 2 to 3 minutes and the time shown against a break is the time for the middle of the break expressed in Greenwich mean time. Increasing ordinates for H. F. and V. F. curves mean increase in force, and for the declination curves decrease of westerly declination.

S. K. BANERJI,
Meteorologist, Bombay.

Colaba Observatory, Bombay,
The 20th February, 1931.

Meteorological Tables.

(Colaba Observatory.)

JANUARY. (Averages for periods of sixty minutes from full hour to full hour of local mean time.)

(IN INCHES OF MERCURY AT 32° F.)

Date.	Hours.															
	0—1	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12	12—13	13—14		
1	30·032	30·018	30·014	30·008	30·015	30·021	30·044	30·068	30·082	30·074	30·069	30·035	30·004	29·969		
2	29·936	29·872	29·853	29·840	29·850	29·863	29·887	·905	·926	·929	·926	29·907	·870	·835		
3	30·000	·987	·985	·972	·979	·985	30·006	·019	·050	·059	·051	30·021	29·989	·961		
4	·029	30·005	30·002	·986	·992	·992	·017	·036	·067	·070	·056	·045	30·009	·969		
5	29·979	29·964	29·961	·951	·951	·950	29·973	29·981	·007	·009	·008	29·980	29·947	·929		
6	·951	·937	·926	·911	·913	·919	29·937	29·949	29·977	29·979	29·997	·939	·920	·883		
7	·941	·914	·910	·896	·892	·894	·916	·936	·968	·971	·973	·944	·914	·897		
8	·957	·939	·928	·914	·914	·921	·949	·971	·999	30·007	30·011	·987	·956	·917		
9	·936	·919	·917	·903	·910	·918	·948	·969	30·001	·002	29·994	·970	·945	·922		
10	·938	·920	·917	·905	·918	·918	·939	·956	29·987	29·989	·985	·953	·922	·896		
11	·976	·961	·956	·947	·952	·953	·980	·996	30·022	30·023	30·029	30·007	·978	·964		
12	30·035	30·026	30·019	30·007	30·013	30·028	30·054	30·080	30·101	·098	·081	·057	30·026	30·015		
13	·044	·039	·032	·026	·012	·014	·035	·044	·074	·077	·067	·048	·017	29·984		
14	29·982	29·968	29·956	29·952	29·961	29·974	29·996	·015	·036	·041	·030	·009	29·976	·948		
15	·976	·955	·940	·934	·942	·956	·974	·009	·034	·034	·027	·004	·982	·946		
16	30·002	·986	·975	·964	·969	·974	·983	·000	·037	·035	·064	·044	30·014	·980		
17	29·979	·953	·940	·927	·933	·949	·964	29·996	·009	·019	·018	29·986	29·953	·912		
18	·876	·854	·843	·826	·831	·849	·871	·892	·918	·924	·921	·897	·871	·841		
19	·985	·966	·954	·938	·943	·950	·973	·994	·022	·024	·026	30·018	·994	·962		
20	·971	·961	·961	·947	·953	·959	·976	·987	·008	·013	·011	29·994	·957	·924		
21	·922	·913	·901	·894	·894	·907	·937	·957	29·983	29·992	29·982	·961	·933	·894		
22	·907	·886	·881	·871	·876	·885	·901	·922	·951	·967	·961	·946	·926	·899		
23	·925	·913	·908	·898	·910	·925	·955	·976	30·009	30·015	30·009	·994	·965	·932		
24	·911	·907	·893	·881	·882	·889	·907	·927	29·955	29·955	29·953	·929	·901	·868		
25	·878	·872	·865	·855	·865	·866	·885	·907	·926	·945	·943	·915	·881	·837		
26	·887	·882	·872	·860	·859	·859	·877	·894	·927	·927	·914	·893	·857	·822		
27	·845	·837	·835	·829	·839	·847	·877	·898	·932	·939	·943	·932	·902	·871		
28	·914	·904	·903	·888	·896	·911	·945	·968	·997	30·006	30·002	·986	·953	·904		
29	·947	·934	·926	·914	·922	·944	·967	·983	30·010	·010	·002	29·979	·947	·914		
30	·949	·934	·928	·912	·917	·926	·952	·970	·005	·014	·011	·984	·947	·899		
31	·915	·907	·899	·888	·889	·897	·924	·946	29·978	29·979	29·975	·951	·927	·907		
Mean.	29·957	29·943	29·935	29·924	29·926	29·937	29·963	29·982	30·007	30·011	30·007	29·983	29·954	29·922		
Variation.	+·006	—·008	—·016	—·027	—·025	—·014	+·008	+·028	+·056	+·060	+·060	+·032	+·003	—·029		

FEBRUARY.

1	29·956	29·950	29·945	29·931	29·930	29·936	29·960	29·973	29·995	30·004	30·012	29·983	29·953	29·923		
2	·928	·913	·898	·882	·873	·876	·894	·909	·934	29·946	29·954	·942	·914	·894		
3	·925	·913	·915	·902	·917	·929	·963	·981	30·011	30·029	30·024	30·005	·979	·954		
4	·938	·979	·966	·961	·965	·980	30·007	30·024	·047	·058	·055	·043	30·009	·963		
5	·974	·953	·946	·932	·932	·932	29·958	29·968	29·999	·002	29·994	29·972	29·940	·901		
6	·871	·840	·834	·823	·827	·837	·862	·884	·908	29·922	·914	·902	·884	·864		
7	·896	·885	·885	·878	·893	·895	·915	·931	·970	·982	·983	·957	·941	·906		
8	·919	·911	·910	·904	·911	·914	·951	·971	·995	·997	·995	·975	·946	·906		
9	·925	·905	·902	·890	·885	·893	·919	·932	·960	·973	·977	·964	·934	·905		
10	·900	·884	·882	·880	·875	·888	·914	·931	·956	·963	·968	·946	·925	·902		
11	·878	·861	·844	·830	·850	·868	·900	·928	·966	·977	·979	·960	·935	·906		
12	·982	·971	·962	·964	·973	·992	30·016	30·042	30·073	30·079	30·079	30·056	30·026	30·001		
13	30·022	30·014	30·008	·991	·994	30·005	·025	·054	·079	·080	·083	·059	·043	·016		
14	29·990	29·968	29·960	·962	·957	29·961	29·974	29·986	·009	·010	·000	29·978	29·957	29·924		
15	·944	·930	·922	·916	·932	·938	·954	·976	·002	·002	29·998	·966	·928	·898		
16	·906	·890	·879	·869	·872	·881	·906	·922	29·944	29·944	·946	·920	·888	·870		
17	·886	·885	·882	·848	·844	·867	·892	·904	·936	·949	·942	·919	·902	·869		
18	·875	·853	·843	·841	·842	·863	·873	·898	·920	·932	·946	·917	·885	·862		
19	·918	·907	·910	·908	·919	·925	·964	·986	30·017	30·019	30·017	·991	·972	·942		
20	·966	·949	·942	·919	·921	·925	·952	·972	·001	·001	·002	·975	·945	·921		
21	·938	·911	·904	·897	·905	·910	·946	·956	29·986	29·988	29·988	·956	·936	·896		
22	·905	·885	·877	·863	·873	·879	·912	·933	·965	·971	·973	·949	·931	·901		
23	·895	·881	·883	·880	·871	·871	·906	·922	·961	·967	·969	·939	·921	·887		
24	·931	·907	·899	·889	·894	·896	·931	·943	·982	·984	29·989	·958	·931	·909		
25	·909	·878	·874	·859	·867	·871	·901	·911	·934	·946	·947	·916	·889	·849		
26	·887	·866	·854	·840	·844	·850	·886	·904	·930	·934	·934	·899	·870	·848		
27	·863	·842	·843	·838	·849	·859	·887	·908	·939	·939	·938	·913	·886	·850		
28	·890	·870	·865	·856	·864	·872	·903	·920	·954	·960	·962	·936	·908	·886		
29	·897	·886	·861	·848	·857	·862	·894	·899	·921	·926	·927	·896	·873	·837		
Mean.	29·923	29·906	29·899	29·889	29·894	29·902	29·930	29·947	29·976	29·982	29·982	29·959	29·933	29·903		
Variation.	+·004	—·013	—·020	—·030	—·025	—·017	+·011	+·028	+·057	+·063	+·063	+·040	+·014	—·016		

JANUARY. (Averages for periods of sixty minutes from full hour to full hour of local mean time.)

(IN INCHES OF MERCURY AT 32° F.)

Hours.											Mean.	Maximum.		Minimum.		Date.
14—15	15—16	16—17	17—18	18—19	19—20	20—21	21—22	22—23	23—24		Time.	Mag.	Time.	Mag.	
											H. M.		H. M.		
29·953	29·944	29·948	29·957	29·979	30·002	30·018	30·015	30·011	29·992	30·011	8 30	30·086	15 50	29·942	1
·923	·919	·930	·939	·963	29·983	·009	·007	·014	·990	29·976	9 37	·031	15 18	29·917	2
·954	·944	·955	·966	·984	30·017	·048	·048	·043	30·041	30 003	9 48	·061	15 25	·942	3
·952	·918	·937	·946	·964	29·973	29·998	29·988	29 998	29 984	29·968	9 27	·071	16 13	·926	4
·912	·895	·909	·914	·936	·955	·977	·966	·970	·955	29·927	9 40	·010	15 45	·904	5
·889	·866	·841	·869	·909	·927	·955	·953	·952	·941	29·927	9 38	29·981	15 30	·865	6
·889	·879	·887	·894	·923	·941	·957	·958	·973	·966	29·926	10 8	·975	15 55	·878	7
·898	·880	·895	·906	·927	·944	·949	·949	·950	·937	29·942	10 5	30·014	15 40	·879	8
·909	·892	·901	·906	·937	·950	·969	·962	·963	·949	29·941	9 28	·023	15 44	·891	9
·893	·879	·902	·908	·933	·949	·973	·977	·989	·978	29·939	9 30	29·991	15 12	·878	10
·958	·949	·962	·979	30·005	30·027	30·047	30·053	30·051	30·038	29·982	21 33	30·056	3 26	·946	11
·985	·983	·992	30·005	·029	·036	·053	·062	·061	·052	30·037	8 52	·102	15 8	·982	12
·966	·957	·958	30·972	29·984	·005	·024	·018	·009	29·999	30·015	9 20	·070	15 45	·956	13
·939	·925	·932	·942	·958	29·978	29·993	·002	29·996	·987	29·979	9 40	·043	15 15	·924	14
·928	·913	·917	·928	·955	·980	30·008	·020	30·016	30·010	29·974	9 36	·036	15 43	·912	15
·958	·955	·947	·954	·972	·986	·002	·012	·006	29·994	29·993	10 16	·066	16 12	·946	16
·889	·882	·894	·902	·937	·955	29·989	29·992	29 999	·981	29·958	10 9	·019	15 23	·881	17
·921	·911	·920	·926	·952	·974	·994	30·000	·008	·988	29·966	9 40	·026	15 32	·909	18
·938	·917	·913	·921	·944	·959	·975	29·985	·987	·975	29·976	10 18	·036	16 16	·911	19
·884	·876	·883	·892	·904	·920	·935	·946	·946	·935	29·948	9 40	·013	15 38	·876	20
·871	·852	·851	·862	·878	·883	·913	·916	·922	·910	29·913	9 30	29·995	16 13	·849	21
·881	·864	·873	·887	·905	·918	·938	·941	·943	·926	29·911	10 14	·016	15 10	·860	22
·911	·895	·895	·895	·914	·925	·932	·936	·936	·923	29·937	9 40	30·016	16 18	·893	23
·856	·845	·847	·863	·881	·885	·899	·904	·897	·887	29·897	9 22	29·956	15 30	·843	24
·826	·813	·826	·834	·857	·866	·890	·886	·891	·881	29·876	9 40	·947	15 48	·811	25
·797	·777	·785	·799	·825	·841	·861	·855	·849	·837	29·856	9 42	·929	15 55	·775	26
·864	·856	·869	·881	·899	·913	·929	·927	·929	·915	29·887	10 8	·946	3 40	·828	27
·887	·884	·895	·904	·924	·936	·957	·958	·959	·953	29·933	9 42	30·008	15 18	·883	28
·900	·882	·898	·906	·928	·946	·968	·967	·970	·955	29·947	9 8	·012	15 15	·880	29
·872	·852	·860	·870	·892	·920	·936	·940	·936	·914	29·926	9 36	·016	15 20	·852	30
·900	·888	·903	·908	·928	·947	·961	·967	·975	·964	29·930	9 8	29·981	15 18	·887	31
29.906	29.894	29·906	29·911	29·933	29·949	29·969	29·971	29·972	29·960	29·951					Mean.
—·045	—·057	—·049	—·040	—·018	—·002	+·018	+·020	+·021	+·009						Variation.

FEBRUARY.

29·907	29·897	29·899	29·903	29·918	29·931	29·948	29·947	29·947	29·939	29·945	9 40	30·005	15 46	29·896	1
·876	·870	·876	·877	·900	·917	·928	·934	·940	·918	·908	10 14	29·956	15 40	·868	2
·939	·927	·928	·937	·953	·973	·989	·997	30·002	30·003	·982	9 30	30·031	3 25	·901	3
·946	·933	·935	·931	·948	·954	·979	·981	29·997	29·980	·984	9 40	·059	16 10	·930	4
·874	·851	·846	·850	·868	·882	·898	·902	·900	·892	·924	9 30	·004	16 5	·845	5
·852	·832	·842	·846	·874	·884	·902	·910	·916	·902	·873	9 26	29·924	3 20	·822	6
·877	·870	·885	·889	·906	·923	·943	·941	·937	·927	·917	9 47	·934	15 15	·869	7
·893	·878	·893	·905	·926	·943	·953	·956	·959	·943	·936	9 28	·999	15 15	·877	8
·884	·864	·870	·889	·883	·896	·916	·917	·920	·906	·913	10 5	·979	15 39	·863	9
·860	·853	·858	·857	·877	·894	·912	·905	·912	·892	·901	10 5	·969	16 34	·852	10
·855	·848	·903	·910	·915	·939	·984	·995	·999	·987	·923	22 15	30·000	3 15	·829	11
·881	·861	·870	·872	·895	30·010	30·029	30·024	30·033	30·024	30·009	10 25	·080	15 42	·860	12
·935	·921	·950	·961	·978	29·979	·005	·004	·000	29·992	·014	10 25	·034	16 55	·958	13
·908	·897	·899	·894	·913	·927	29·938	29·951	29·951	·949	29·932	9 20	·011	15 40	·892	14
·876	·869	·880	·891	·896	·904	·921	·928	·930	·916	·927	9 20	·003	15 15	·858	15
·846	·839	·846	·854	·874	·892	·910	·913	·906	·896	·892	10 20	29·948	15 40	·828	16
·852	·845	·841	·850	·858	·874	·890	·898	·894	·889	·881	9 20	·930	16 12	·843	17
·841	·817	·817	·811	·872	·882	·915	·915	·929	·915	·879	10 13	·947	15 45	·816	18
·938	·929	·928	·929	·947	·957	·984	·985	·987	·972	·955	9 55	30·026	1 34	·907	19
·895	·874	·877	·878	·900	·910	·941	·945	·951	·935	·937	10 12	·043	15 40	·872	20
·876	·862	·866	·866	·884	·898	·923	·923	·930	·915	·919	10 10	29·989	15 25	·860	21
·859	·843	·849	·841	·863	·871	·901	·900	·909	·893	·898	10 10	·974	15 43	·840	22
·869	·853	·857	·872	·896	·921	·950	·955	·957	·939	·910	10 15	·970	15 22	·851	23
·845	·859	·869	·869	·891	·898	·920	·921	·926	·906	·916	10 15	·990	15 45	·858	24
·830	·811	·811	·811	·819	·851	·890	·891	·903	·889	·879	10 10	·948	16 40	·809	25
·825	·804	·809	·809	·825	·833	·874	·874	·874	·874	·865	9 5	·935	15 45	·803	26
·836	·815	·823	·833	·855	·873	·902	·904	·905	·895	·875	9 38	·940	15 43	·813	27
·877	·857	·846	·852	·879	·888	·916	·917	·924	·904	·896	10 10	·964	16 17	·845	28
·811	·781	·789	·789	·811	·813	·837	·849	·861	·857	·857	10 45	·928	16 10	·780	29
29·883	29·866	29·872	29·875	29·896	29·908	29·931	29·934	29·938	29·926	29·919					Mean.
—·036	—·053	—·047	—·044	—·023	—·011	+·012	+·015	+·019	+·007						Variation.

MARCH. (Averages for periods of sixty minutes from full hour to full hour of local mean time.)
(IN INCHES OF MERCURY AT 32° F.)

Date.	Hours.													
	0—1	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12	12—13	13—14
1	29·848	29·827	29·824	29·818	29·832	29·836	29·870	29·849	29·923	29·927	29·922	29·899	29·881	29·859
2	·903	·885	·882	·864	·867	·865	·893	·907	·927	·935	·937	·915	·893	·868
3	·894	·884	·872	·860	·868	·870	·898	·915	·938	·937	·937	·914	·893	·870
4	·885	·880	·847	·829	·846	·854	·880	·906	·932	·939	·931	·911	·899	·866
5	·891	·880	·857	·850	·861	·867	·893	·910	·932	·926	·942	·922	·886	·853
6	·868	·840	·842	·824	·838	·838	·858	·873	·904	·910	·920	·900	·885	·859
7	·874	·847	·843	·829	·840	·838	·861	·885	·912	·924	·938	·922	·894	·844
8	·886	·871	·858	·852	·858	·862	·895	·906	·928	·923	·920	·897	·876	·830
9	·859	·839	·832	·824	·838	·841	·866	·881	·912	·915	·918	·898	·882	·831
10	·848	·828	·826	·802	·810	·811	·846	·864	·891	·891	·888	·884	·850	·820
11	·872	·849	·850	·832	·846	·846	·871	·878	·905	·904	·906	·880	·857	·850
12	·855	·839	·831	·818	·836	·844	·858	·880	·905	·895	·897	·871	·853	·820
13	·836	·818	·819	·804	·821	·830	·848	·865	·892	·891	·898	·876	·850	·813
14	·858	·844	·852	·841	·854	·856	·868	·909	·914	·944	·948	·924	·898	·859
15	·861	·830	·831	·831	·840	·844	·872	·890	·921	·926	·934	·911	·892	·871
16	·902	·887	·879	·871	·890	·899	·921	·939	·963	·967	·971	·955	·939	·906
17	·924	·906	·907	·900	·914	·923	·949	·965	·991	·993	·988	·968	·941	·917
18	·903	·908	·906	·896	·909	·910	·938	·954	·974	·966	·962	·928	·902	·858
19	·882	·854	·858	·846	·856	·862	·898	·908	·932	·930	·932	·902	·868	·853
20	·856	·834	·822	·819	·827	·835	·869	·889	·919	·916	·916	·895	·868	·829
21	·849	·830	·822	·810	·817	·819	·858	·882	·903	·902	·901	·876	·858	·843
22	·867	·852	·848	·837	·846	·859	·880	·898	·927	·933	·930	·920	·900	·877
23	·867	·852	·842	·834	·847	·863	·889	·913	·942	·944	·953	·934	·912	·888
24	·901	·879	·873	·864	·875	·887	·913	·919	·943	·946	·953	·927	·897	·859
25	·826	·803	·799	·785	·799	·807	·834	·869	·871	·876	·877	·850	·826	·813
26	·826	·799	·805	·789	·814	·826	·849	·860	·885	·886	·891	·863	·837	·801
27	·829	·810	·803	·794	·803	·811	·839	·860	·893	·901	·899	·877	·861	·822
28	·822	·816	·816	·808	·812	·823	·850	·866	·906	·900	·908	·889	·877	·841
29	·821	·800	·798	·772	·783	·799	·827	·839	·864	·850	·838	·835	·818	·775
30	·780	·779	·786	·773	·784	·801	·830	·855	·876	·866	·873	·850	·822	·782
31	·810	·795	·790	·772	·790	·805	·830	·848	·876	·876	·881	·856	·839	·811
Mean	29·852	29·843	29·839	29·827	29·839	29·846	29·874	29·890	29·917	29·918	29·921	29·897	29·875	29·846
Variation	+·004	—·015	—·019	—·031	—·019	—·012	+·016	+·032	+·059	+·060	+·063	+·039	+·017	—·012

APRIL.

1	29·811	29·783	29·771	29·759	29·787	29·801	29·823	29·839	29·859	29·865	29·861	29·821	29·811	29·779
2	·799	·781	·783	·769	·781	·795	·821	·836	·859	·859	·849	·817	·791	·761
3	·784	·760	·768	·762	·771	·779	·805	·826	·854	·854	·860	·840	·814	·778
4	·811	·793	·796	·791	·799	·800	·826	·844	·874	·874	·890	·874	·856	·824
5	·869	·847	·845	·838	·836	·851	·868	·904	·917	·916	·911	·891	·871	·836
6	·845	·820	·808	·794	·802	·802	·822	·835	·860	·855	·860	·828	·799	·753
7	·732	·709	·711	·690	·698	·713	·732	·748	·779	·780	·788	·771	·756	·716
8	·756	·743	·742	·737	·758	·776	·800	·817	·842	·845	·842	·820	·808	·794
9	·791	·777	·776	·770	·791	·805	·822	·832	·862	·859	·861	·840	·825	·780
10	·809	·790	·782	·768	·782	·786	·804	·821	·844	·840	·837	·812	·797	·764
11	·794	·776	·781	·767	·779	·780	·802	·813	·824	·822	·821	·801	·779	·743
12	·758	·747	·741	·733	·742	·747	·774	·794	·819	·811	·805	·781	·761	·728
13	·725	·706	·697	·675	·691	·697	·731	·743	·758	·753	·753	·721	·701	·670
14	·695	·671	·675	·666	·686	·693	·730	·745	·776	·771	·775	·747	·730	·699
15	·729	·709	·707	·704	·719	·730	·770	·779	·810	·809	·798	·767	·750	·711
16	·764	·728	·736	·732	·762	·761	·791	·802	·828	·825	·824	·795	·777	·760
17	·794	·774	·758	·758	·779	·789	·829	·833	·853	·854	·861	·846	·826	·793
18	·866	·789	·788	·786	·802	·813	·841	·852	·869	·868	·871	·861	·852	·828
19	·859	·841	·838	·833	·847	·853	·892	·905	·939	·938	·937	·919	·911	·884
20	·918	·896	·897	·888	·896	·902	·926	·932	·960	·949	·947	·926	·909	·876
21	·866	·845	·848	·839	·848	·852	·876	·889	·903	·895	·895	·867	·839	·796
22	·818	·794	·784	·776	·783	·783	·798	·808	·826	·825	·827	·807	·782	·748
23	·781	·757	·750	·745	·761	·771	·794	·808	·826	·824	·822	·807	·789	·756
24	·775	·763	·773	·774	·793	·799	·826	·844	·873	·873	·870	·864	·833	·806
25	·814	·797	·798	·792	·809	·821	·850	·861	·882	·874	·879	·849	·837	·794
26	·779	·764	·761	·758	·776	·788	·812	·828	·846	·842	·846	·818	·795	·763
27	·748	·739	·739	·731	·749	·755	·782	·799	·820	·815	·810	·788	·766	·724
28	·749	·729	·733	·733	·745	·755	·789	·799	·819	·818	·823	·805	·791	·764
29	·801	·777	·766	·755	·768	·775	·802	·814	·835	·835	·847	·829	·814	·779
30	·762	·766	·757	·752	·767	·779	·807	·829	·846	·852	·853	·839	·825	·797
Mean.	29·792	29·773	29·771	29·762	29·777	29·785	29·812	29·826	29·849	29·846	29·847	29·826	29·806	29·773
Variation	+·004	—·015	—·017	—·026	—·011	—·003	+·024	+·038	+·061	+·058	+·059	+·038	+·018	—·015

MARCH. (Averages for periods of sixty minutes from full hour to full hour of local mean time.)

(IN INCHES OF MERCURY AT 32° F.)

Hours.										Mean.	Maximum.		Minimum.		Date.
14—15	15—16	16—17	17—18	18—19	19—20	20—21	21—22	22—23	23—24		Time.	Mag.	Time.	Mag.	
											H. M.		H. M.		
29·846	29·826	29·830	29·833	29·863	29·889	29·907	29·943	29·926	29·910	29·871	9 15	29·928	3 40	29·816	1
·841	·820	·826	·850	·876	·898	·911	·906	·911	·901	·897	10 17	·930	16 26	·828	2
·843	·824	·826	·824	·853	·882	·890	·893	·906	·891	·882	10 46	·940	16 52	·823	3
·849	·830	·840	·839	·861	·873	·905	·906	·922	·902	·889	9 48	·941	15 48	·829	4
·838	·817	·827	·830	·856	·867	·892	·889	·903	·871	·877	10 17	·944	15 40	·816	5
·845	·834	·840	·846	·864	·868	·898	·894	·900	·872	·888	10 17	·951	2 45	·823	6
·836	·820	·828	·837	·856	·874	·890	·897	·906	·896	·870	10 25	·939	16 32	·819	7
·816	·796	·800	·804	·827	·841	·864	·872	·870	·861	·853	8 37	·929	15 37	·745	8
·800	·779	·788	·790	·812	·823	·848	·860	·864	·849	·846	10 58	·910	15 39	·778	9
·804	·790	·798	·801	·822	·832	·858	·860	·882	·868	·840	6 30	·897	15 42	·789	10
·820	·796	·805	·797	·815	·834	·842	·842	·856	·849	·849	10 10	·906	15 33	·795	11
·801	·775	·784	·784	·805	·820	·846	·847	·855	·839	·840	8 14	·906	15 35	·774	12
·822	·804	·820	·819	·832	·844	·870	·870	·883	·865	·846	10 59	·899	3 2	·803	13
·840	·819	·821	·826	·853	·865	·893	·894	·898	·876	·875	10 9	·949	15 38	·818	14
·818	·826	·841	·843	·874	·881	·904	·907	·917	·907	·878	10 22	·956	15 45	·825	15
·879	·864	·872	·876	·902	·911	·938	·940	·947	·932	·915	10 10	·976	15 35	·863	16
·897	·873	·881	·885	·912	·927	·951	·960	·958	·937	·932	9 45	·994	15 22	·872	17
·838	·829	·824	·832	·871	·880	·910	·910	·910	·894	·901	8 37	·976	15 43	·818	18
·828	·810	·814	·814	·834	·843	·873	·870	·880	·865	·857	10 15	·902	15 36	·809	19
·813	·793	·795	·796	·813	·827	·854	·864	·867	·853	·849	9 45	·920	15 50	·792	20
·818	·795	·805	·804	·823	·832	·872	·876	·885	·871	·848	8 50	·904	15 42	·794	21
·850	·838	·837	·839	·844	·854	·876	·876	·879	·867	·872	10 12	·939	17 20	·820	22
·800	·841	·847	·847	·861	·877	·897	·896	·914	·905	·885	10 5	·954	3 5	·833	23
·826	·803	·801	·790	·795	·797	·827	·831	·840	·829	·866	10 15	·955	17 40	·789	24
·778	·762	·761	·756	·777	·781	·812	·821	·839	·820	·813	10 20	·878	15 46	·760	25
·776	·750	·764	·757	·777	·791	·816	·828	·840	·831	·819	10 15	·892	16 37	·749	26
·792	·773	·766	·765	·787	·799	·807	·820	·833	·824	·823	9 45	·902	17 4	·764	27
·818	·796	·794	·789	·802	·813	·839	·840	·845	·826	·832	10 15	·909	17 25	·788	28
·760	·736	·733	·726	·743	·755	·792	·793	·807	·788	·765	8 37	·865	16 22	·725	29
·764	·738	·726	·718	·750	·766	·800	·819	·826	·819	·799	10 17	·877	15 ·716		30
·784	·760	·759	·753	·773	·789	·820	·829	·833	·814	·812	10 10	·882	17 25	·752	31
29·824	29·803	29·806	29·808	29·830	29·841	29·867	29·872	29·880	29·866	29·858					Mean
—·034	—·055	—·049	—·050	—·028	·017	+·009	+·014	+·022	+·008						Variation.

APRIL.

29·754	29·737	29·743	29·736	29·755	29·771	29·793	29·793	29·800	29·798	29·795	3 55	29·866	15	14	29·735	1
·735	·711	·703	·639	·725	·743	·778	·791	·809	·802	·784	9 10	·861	17	12	·698	2
·760	·741	·739	·742	·780	·797	·816	·818	·822	·811	·795	10 15	·861	16	38	·738	3
·792	·760	·784	·808	·860	·882	·897	·908	·899	·875	·838	21 30	·908	15	36	·758	4
·815	·790	·791	·795	·826	·832	·842	·862	·872	·858	·855	8 40	·918	15	45	·789	5
·709	·674	·672	·681	·677	·695	·730	·740	·760	·747	·727	8 50	·801	17	32	·666	6
·703	·688	·692	·695	·715	·720	·765	·764	·772	·764	·734	10 33	·788	15	42	·687	7
·782	·768	·760	·760	·788	·796	·812	·812	·816	·793	·790	9 45	·840	3	10	·758	8
·767	·747	·745	·744	·771	·782	·800	·802	·819	·809	·799	8 50	·863	17	5	·733	9
·738	·712	·724	·724	·758	·767	·797	·798	·810	·800	·786	8 20	·842	16	36	·711	10
·724	·696	·691	·690	·715	·731	·755	·766	·778	·762	·736	8 40	·825	16	55	·680	11
·705	·682	·676	·675	·704	·715	·743	·739	·752	·737	·715	8 58	·820	17	35	·674	12
·644	·625	·610	·609	·643	·660	·675	·681	·709	·697	·690	8 48	·756	17	0	·608	13
·682	·660	·667	·671	·705	·713	·743	·744	·760	·723	·713	8 45	·778	15	45	·658	14
·701	·687	·703	·711	·745	·756	·785	·780	·777	·753	·745	8 40	·812	15	40	·686	15
·745	·727	·727	·727	·751	·758	·787	·790	·814	·798	·771	8 52	·829	16	25	·726	16
·777	·750	·763	·768	·788	·800	·819	·822	·829	·817	·804	10 15	·862	3	25	·755	17
·810	·790	·793	·793	·824	·831	·855	·859	·873	·861	·830	10 18	·879	2	55	·785	18
·809	·847	·842	·858	·876	·889	·915	·921	·938	·925	·887	8 53	·940	3	20	·831	19
·849	·817	·814	·813	·832	·840	·863	·868	·881	·867	·846	8 50	·891	17	19	·812	20
·717	·751	·750	·753	·775	·788	·812	·814	·828	·821	·831	8 40	·904	16	35	·749	21
·722	·698	·704	·706	·737	·749	·776	·776	·788	·773	·774	10 20	·828	15	50	·696	22
·735	·714	·722	·722	·746	·762	·776	·78·	·796	·780	·772	8 40	·827	15	26	·713	23
·783	·760	·761	·756	·790	·801	·821	·822	·834	·819	·810	10 15	·880	16	25	·759	24
·772	·747	·749	·749	·772	·774	·796	·797	·804	·787	·808	8 42	·883	16	30	·746	25
·727	·701	·700	·701	·735	·746	·761	·761	·771	·752	·772	10 20	·847	16	56	·699	26
·705	·683	·678	·679	·706	·716	·736	·748	·764	·757	·747	8 30	·821	16	16	·676	27
·746	·722	·714	·735	·776	·788	·802	·814	·828	·801	·773	22 10	·829	16	37	·717	28
·760	·729	·721	·723	·747	·756	·776	·787	·716	·783	·782	9 25	·848	13	30	·720	29
·772	·750	·746	·741	·761	·770	·802	·808	·823	·809	·793	10 15	·859	17	16	·740	30
29·752	29·729	29·730	29·732	29·760	29·771	29·795	29·799	29·810	29·796	29·788					Mean.
—·036	—·059	—·058	—·056	—·028	—·017	+·007	+·011	+·022	+·008						Variation.

BAROMETRIC PRESSURE, 1928.

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

MAY. (IN INCHES OF MERCURY AT 32° F.)

Date.	Hours.															
	0—1	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12	12—13	13—14		
1	29·804	29·782	29·788	29·773	29·789	29·791	29·832	29·845	29·868	29·860	29·868	29·850	29·837	29·805		
2	·802	·775	·768	·759	·775	·781	·816	·833	·868	·869	·871	·847	·838	·806		
3	·791	·768	·773	·759	·771	·772	·812	·827	·847	·847	·847	·828	·811	·779		
4	·788	·767	·758	·758	·769	·783	·814	·833	·853	·850	·848	·828	·815	·782		
5	·800	·787	·794	·789	·792	·802	·827	·839	·860	·859	·857	·832	·839	·807		
6	·771	·751	·761	·747	·760	·774	·808	·829	·842	·833	·829	·819	·798	·787		
7	·765	·743	·740	·732	·748	·753	·795	·809	·838	·836	·840	·817	·803	·775		
8	·748	·726	·724	·718	·738	·748	·774	·783	·809	·809	·828	·814	·801	·780		
9	·709	·676	·672	·664	·681	·681	·709	·841	·859	·823	·821	·799	·776	·741		
10	·728	·714	·709	·693	·703	·707	·733	·743	·772	·763	·780	·766	·744	·723		
11	·716	·697	·701	·705	·729	·739	·764	·777	·797	·796	·789	·764	·752	·724		
12	·722	·698	·699	·683	·694	·702	·731	·733	·760	·756	·756	·736	·722	·701		
13	·716	·695	·700	·694	·707	·717	·738	·708	·784	·783	·786	·765	·757	·733		
14	·760	·743	·741	·721	·752	·757	·785	·809	·815	·814	·820	·801	·790	·783		
15	·776	·759	·759	·755	·770	·779	·801	·810	·832	·835	·846	·832	·821	·793		
16	·807	·791	·797	·793	·813	·827	·856	·866	·884	·885	·891	·871	·849	·827		
17	·806	·784	·785	·775	·801	·812	·843	·852	·863	·864	·880	·848	·848	·808		
18	·827	·809	·809	·801	·816	·826	·849	·862	·878	·878	·880	·864	·856	·842		
19	·830	·802	·799	·788	·807	·805	·831	·838	·855	·853	·859	·840	·833	·809		
20	·795	·771	·764	·757	·763	·766	·791	·801	·813	·813	·817	·803	·785	·756		
21	·740	·714	·711	·702	·723	·732	·761	·770	·793	·796	·796	·782	·783	·750		
22	·749	·717	·718	·715	·727	·726	·758	·767	·790	·792	·788	·771	·781	·750		
23	·732	·708	·705	·695	·709	·713	·752	·767	·794	·798	·811	·799	·801	·779		
24	·804	·787	·787	·776	·793	·797	·823	·837	·852	·851	·855	·837	·821	·808		
25	·792	·767	·761	·761	·778	·787	·820	·832	·847	·848	·861	·836	·826	·804		
26	·818	·795	·789	·787	·798	·808	·835	·842	·858	·851	·851	·829	·821	·09		
27	·795	·773	·770	·764	·774	·778	·805	·815	·829	·827	·827	·807	·795	·766		
28	·786	·761	·755	·747	·769	·782	·815	·819	·836	·848	·846	·821	·800	·786		
29	·817	·798	·800	·796	·803	·801	·833	·827	·839	·833	·828	·809	·799	·772		
30	·764	·740	·735	·729	·732	·729	·753	·757	·773	·767	·771	·757	·745	·737		
31	·740	·714	·706	·692	·705	·706	·738	·749	·764	·759	·759	·742	·726	·694		
Mean	29·777	29·755	29·754	29·746	29·761	29·767	29·796	29·807	29·827	29·825	29·829	29·811	29·798	29·775		
Variation	·000	—·022	—·023	—·031	—·016	—·010	+·019	+·030	+·050	+·048	+·052	+·034	+·021	—·002		

JUNE.

1	29·733	29·723	29·721	29·711	29·715	29·725	29·749	29·743	29·767	29·760	29·762	29·742	29·723	29·703		
2	·745	·694	·692	·676	·683	·682	·705	·716	·731	·723	·727	·704	·696	·669		
3	·655	·657	·651	·643	·653	·657	·687	·687	·710	·704	·713	·693	·678	·665		
4	·673	·659	·660	·648	·652	·654	·673	·683	·706	·705	·710	·690	·685	·653		
5	·676	·653	·651	·640	·646	·647	·669	·673	·698	·698	·709	·684	·670	·650		
6	·633	·608	·602	·592	·593	·588	·615	·621	·649	·636	·638	·615	·599	·575		
7	·598	·575	·570	·554	·561	·567	·590	·601	·615	·615	·622	·607	·595	·589		
8	·576	·548	·547	·531	·543	·547	·574	·584	·600	·590	·604	·586	·580	·556		
9	·571	·547	·547	·533	·543	·547	·571	·585	·602	·612	·612	·596	·588	·564		
10	·578	·561	·552	·548	·553	·562	·581	·589	·596	·600	·596	·588	·576	·541		
11	·529	·518	·514	·503	·517	·523	·546	·555	·574	·563	·569	·562	·561	·536		
12	·508	·507	·507	·490	·492	·495	·520	·546	·569	·570	·574	·555	·544	·529		
13	·556	·542	·540	·540	·551	·572	·598	·602	·615	·604	·595	·597	·594	·582		
14	·593	·568	·561	·540	·554	·561	·588	·602	·613	·623	·616	·616	·608	·589		
15	·615	·589	·586	·572	·583	·585	·611	·621	·644	·650	·660	·647	·643	·642		
16	·667	·650	·651	·643	·652	·664	·695	·710	·732	·742	·736	·728	·727	·713		
17	·717	·699	·692	·682	·691	·702	·729	·742	·762	·762	·767	·757	·744	·737		
18	·733	·710	·708	·694	·702	·702	·726	·738	·753	·758	·764	·748	·746	·719		
19	·664	·668	·664	·654	·663	·662	·676	·677	·694	·685	·695	·676	·665	·643		
20	·630	·604	·603	·590	·610	·614	·646	·663	·685	·694	·708	·690	·688	·681		
21	·680	·662	·668	·658	·668	·681	·683	·704	·716	·731	·731	·736	·721	·712	·698	
22	·704	·674	·666	·654	·667	·672	·702	·707	·713	·697	·710	·700	·706	·681		
23	·666	·642	·649	·631	·644	·654	·679	·673	·691	·689	·685	·664	·658	·658		
24	·635	·628	·629	·622	·639	·639	·659	·667	·660	·664	·667	·662	·651	·630		
25	·620	·613	·608	·600	·600	·603	·624	·628	·646	·648	·649	·631	·624	·614		
26	·631	·608	·604	·591	·593	·601	·625	·640	·661	·661	·672	·670	·666	·643		
27	·700	·681	·671	·665	·682	·691	·718	·730	·754	·754	·760	·747	·730	·724		
28	·731	·708	·706	·695	·704	·710	·748	·761	·776	·781	·782	·763	·762	·741		
29	·718	·697	·693	·682	·698	·707	·740	·740	·751	·754	·781	·765	·751	·745		
30	·711	·687	·687	·672	·676	·687	·708	·711	·727	·721	·722	·705	·705	·691		
Mean	29·651	29·629	29·627	29·616	29·625	29·630	29·656	29·663	29·681	29·680	29·685	29·670	29·662	29·646		
Variation	+·006	—·016	—·018	—·029	—·020	—·015	+·011	+·018	+·036	+·035	+·040	+·025	+·017	+·001		

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

MAY. (IN INCHES OF MERCURY AT 32° F.)

Hours.											Mean.	Maximum.		Minimum.		Date.
14—15	15—16	16—17	17—18	18—19	19—20	20—21	21—22	22—23	23—24			Time.	Mag.	Time.	Mag.	
												H. M.		H. M.		
29·789	29·761	29·751	29·749	29·775	29·777	29·799	29·803	29·816	29·807		29·805	8 58		29·869	18 10	29·743	1
·783	·757	·757	·763	·777	·778	·799	·799	·813	·799		·801	9 6		·878	16 8	·744	2
·788	·738	·737	·737	·753	·763	·787	·779	·797	·787		·786	9 30		·848	16 38	·722	3
·758	·747	·750	·740	·759	·757	·803	·813	·831	·813		·795	9 10		·854	16 40	·739	4
·791	·765	·763	·761	·767	·767	·781	·781	·795	·779		·803	9 57		·868	16 12	·752	5
·765	·741	·733	·729	·740	·750	·770	·770	·779	·761		·776	8 30		·843	17 24	·710	6
·764	·738	·729	·721	·726	·738	·762	·762	·763	·752		·768	9 5		·841	17 50	·720	7
·764	·742	·747	·747	·762	·749	·783	·793	·810	·810		·771	10 56		·829	3 8	·712	8
·730	·702	·704	·696	·712	·709	·728	·724	·744	·730		·721	8 22		·831	17 20	·693	9
·708	·689	·690	·696	·708	·717	·744	·744	·749	·728		·727	9 15		·782	16 22	·677	10
·708	·690	·693	·702	·723	·727	·742	·742	·754	·732		·736	9 2		·805	2 12	·683	11
·692	·673	·675	·676	·701	·711	·726	·725	·735	·721		·714	8 55		·764	16 16	·660	12
·724	·706	·707	·721	·740	·761	·771	·773	·784	·767		·741	21 40		·788	3 58	·692	13
·767	·748	·757	·759	·775	·776	·797	·796	·804	·786		·777	10 0		·824	3 50	·730	14
·781	·762	·762	·762	·774	·782	·804	·803	·813	·808		·792	9 35		·847	2 55	·749	15
·805	·781	·781	·769	·791	·801	·823	·822	·834	·816		·824	9 50		·892	16 36	·767	16
·793	·777	·774	·773	·796	·805	·824	·829	·842	·825		·816	9 30		·873	16 35	·771	17
·832	·799	·798	·793	·812	·814	·838	·834	·856	·836		·833	9 45		·880	16 38	·782	18
·790	·769	·763	·766	·781	·792	·808	·808	·813	·806		·810	9 2		·860	16 38	·764	19
·735	·707	·701	·696	·712	·708	·733	·738	·743	·739		·769	9 30		·818	17 10	·694	20
·729	·722	·722	·714	·726	·728	·748	·763	·773	·758		·748	9 5		·794	3 32	·699	21
·734	·711	·714	·714	·729	·734	·758	·768	·765	·742		·745	8 25		·791	16 35	·701	22
·773	·761	·767	·767	·789	·797	·809	·808	·820	·811		·770	22 42		·821	3 14	·685	23
·788	·764	·764	·764	·781	·791	·806	·806	·820	·801		·805	9 15		·856	16 10	·755	24
·795	·779	·779	·783	·803	·805	·821	·829	·834	·823		·807	9 30		·853	2 42	·751	25
·787	·761	·755	·755	·774	·782	·803	·803	·817	·801		·805	9 2		·860	2 48	·736	26
·755	·736	·737	·738	·763	·767	·791	·788	·796	·783		·782	9 25		·840	16 10	·732	27
·763	·738	·746	·746	·769	·779	·799	·803	·817	·810		·790	9 10		·856	15 40	·736	28
·761	·728	·733	·736	·755	·760	·768	·768	·773	·749		·758	8 28		·842	16 20	·726	29
·712	·682	·681	·681	·702	·709	·731	·739	·750	·739		·734	8 58		·780	15 50	·680	30
·684	·655	·654	·648	·689	·695	·724	·732	·756	·760		·716	9 0		·769	16 5	·647	31
29·759	29·737	29·736	29·735	29·754	29·759	29·780	29·781	29·794	29·780		29·777						Mean.
—·018	—·040	—·041	—·042	—·023	—·018	+·003	+·004	+·017	+·003								Varia-tion.

JUNE.

29·686	29·658	29·654	29·647	29·668	29·681	29·717	29·734	29·740	29·722	29·716	8 30	29·778	17	22	29·642	1
·665	·641	·635	·626	·652	·665	·690	·703	·693	·686	8 35	·723	17	2	·625	2
·631	·593	·587	·582	·620	·635	·662	·665	·688	·673	·659	9 25	·716	17	5	·581	3
·646	·610	·612	·618	·650	·660	·685	·693	·706	·689	·668	9 7	·718	16	15	·608	4
·624	·594	·599	·590	·610	·619	·641	·640	·649	·640	·618	8 15	·703	16	20	·583	5
·567	·541	·537	·526	·569	·569	·600	·600	·617	·600	·594	8 45	·646	17	15	·524	6
·585	·559	·544	·535	·565	·569	·581	·581	·597	·581	·558	8 58	·624	16	52	·528	7
·551	·524	·519	·513	·538	·548	·571	·582	·587	·577	·562	10 0	·615	16	25	·512	8
·532	·530	·530	·529	·544	·544	·571	·588	·601	·590	·567	9 25	·620	16	25	·520	9
·520	·496	·489	·491	·515	·533	·552	·553	·543	·553	·520	9 20	·602	17	0	·487	10
·515	·491	·482	·481	·505	·513	·521	·531	·544	·527	·528	22 25	·575	4	25	·480	11
·512	·490	·497	·504	·536	·548	·572	·590	·595	·577	·534	9 45	·586	5	50	·489	12
·573	·550	·559	·563	·598	·606	·612	·613	·626	·602	·583	8 10	·688	3	30	·539	13
·586	·569	·577	·580	·594	·598	·615	·621	·633	·626	·592	10 5	·683	4	15	·539	14
·624	·620	·619	·617	·635	·647	·664	·666	·680	·674	·629	22 5	·682	3	55	·570	15
·701	·683	·680	·680	·696	·704	·730	·733	·744	·728	·700	8 55	·752	3	30	·642	16
·727	·708	·717	·711	·726	·733	·747	·744	·754	·741	·729	9 15	·774	4	10	·680	17
·717	·698	·699	·693	·705	·706	·726	·714	·724	·706	·720	9 50	·773	3	0	·685	18
·626	·613	·603	·597	·616	·615	·636	·626	·647	·631	·652	8 32	·699	18	40	·596	19
·676	·656	·638	·638	·666	·667	·694	·694	·701	·689	·650	10 16	·713	3	15	·589	20
·672	·643	·660	·664	·684	·695	·719	·717	·726	·707	·695	9 35	·736	15	15	·641	21
·672	·652	·657	·647	·666	·683	·685	·696	·679	·681	10 25	·714	16	55	·624	22
·647	·629	·623	·619	·642	·642	·663	·663	·679	·659	·656	9 25	·703	16	47	·618	23
·622	·608	·615	·609	·629	·642	·652	·652	·659	·642	·641	9 15	·678	16	5	·607	24
·594	·576	·579	·582	·604	·608	·631	·633	·650	·642	·617	10 0	·663	16	55	·576	25
·636	·618	·616	·618	·648	·656	·687	·694	·698	·694	·644	22 5	·704	3	55	·590	26
·692	·663	·670	·670	·681	·696	·724	·721	·741	·727	·708	9 25	·777	17	35	·659	27
·724	·696	·696	·691	·719	·725	·753	·750	·755	·731	·734	9 35	·793	16	52	·689	28
·727	·702	·699	·687	·707	·709	·730	·730	·734	·717	·723	10 5	·783	17	36	·686	29
·681	·656	·660	·646	·668	·679	·702	·704	·710	·691	·692	8 55	·733	17	5	·645	30
29·632	29·609	29·608	29·605	29·628	29·636	29·658	29·660	29·671	29·656	29·645						Mean.
—·013	—·036	—·037	—·040	—·017	—·009	+·013	+·015	+·026	+·011							Varia-tion.

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

JULY. (IN INCHES OF MERCURY AT 32°F.)

Date.	Hours.														
	0—1	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12	12—13	13—14	
1	29·695	29·664	29·657	29·641	29·651	29·649	29·663	29·671	29·698	29·692	29·703	29·688	29·674	29·667	
2	·647	·620	·612	·602	·604	·610	·635	·646	·681	·656	·667	·654	·666	·644	
3	·642	·612	·595	·578	·586	·580	·612	·632	·662	·660	·666	·648	·625	·621	
4	·630	·588	·576	·564	·572	·576	·601	·612	·637	·636	·642	·627	·631	·640	
5	·623	·607	·607	·591	·591	·591	·613	·623	·651	·660	·672	·666	·656	·655	
6	·685	·660	·665	·665	·672	·678	·710	·730	·759	·760	·770	·752	·758	·749	
7	·739	·719	·719	·707	·717	·704	·733	·733	·764	·747	·760	·731	·718	·709	
8	·703	·680	·675	·661	·672	·673	·683	·687	·703	·696	·699	·684	·676	·656	
9	·648	·625	·623	·611	·625	·631	·644	·642	·670	·657	·659	·641	·629	·616	
10	·613	·592	·582	·563	·571	·573	·595	·608	·623	·617	·620	·600	·594	·586	
11	·598	·579	·583	·567	·571	·577	·603	·616	·629	·617	·633	·613	·598	·579	
12	·617	·599	·602	·605	·617	·621	·649	·663	·694	·701	·702	·686	·653	·661	
13	·681	·658	·653	·642	·653	·642	·679	·690	·714	·714	·721	·711	·692	·682	
14	·718	·694	·680	·664	·663	·671	·700	·712	·730	·730	·737	·728	·718	·699	
15	·724	·701	·689	·671	·674	·678	·702	·718	·734	·734	·742	·728	·726	·710	
16	·720	·695	·683	·669	·670	·679	·702	·715	·731	·732	·739	·723	·711	·697	
17	·700	·673	·662	·652	·656	·659	·678	·688	·701	·702	·709	·696	·688	·667	
18	·660	·635	·622	·608	·611	·616	·623	·632	·651	·653	·656	·650	·642	·628	
19	·640	·620	·611	·600	·605	·613	·630	·641	·643	·650	·656	·662	·663	·651	
20	·638	·615	·602	·593	·604	·604	·615	·613	·624	·628	·642	·632	·629	·616	
21	·607	·595	·590	·585	·585	·593	·607	·617	·632	·635	·645	·633	·630	·619	
22	·653	·640	·642	·645	·657	·667	·671	·679	·691	·691	·699	·695	·692	·679	
23	·702	·687	·674	·672	·679	·681	·708	·716	·727	·727	·729	·722	·710	·694	
24	·690	·676	·668	·663	·668	·678	·693	·694	·677	·683	·689	·677	·668	·644	
25	·635	·622	·619	·616	·627	·635	·662	·668	·676	·678	·684	·674	·671	·664	
26	·695	·681	·678	·672	·674	·683	·709	·710	·724	·729	·730	·713	·704	·684	
27	·719	·703	·695	·679	·675	·675	·696	·704	·726	·732	·737	·723	·725	·706	
28	·718	·694	·680	·674	·676	·677	·703	·717	·742	·734	·742	·724	·729	·712	
29	·734	·709	·705	·698	·713	·724	·747	·759	·777	·775	·783	·767	·761	·748	
30	·747	·723	·710	·701	·707	·710	·736	·748	·764	·762	·760	·742	·728	·709	
31	·694	·673	·661	·650	·650	·654	·681	·694	·705	·705	·712	·706	·694	·668	
Mean	29·675	29·653	29·646	29·635	29·641	29·644	29·665	29·678	29·694	29·694	29·700	29·688	29·680	29·664	
Variation	+·009	—·013	—·020	—·031	—·025	—·022	—·001	+·010	+·026	+·026	+·034	+·022	+·014	—·002	

AUGUST.

1	29·661	29·630	29·624	29·614	29·626	29·634	29·663	29·671	29·690	29·689	29·698	29·688	29·682	29·660	
2	·682	·661	·658	·647	·664	·674	·696	·697	·724	·728	·732	·714	·706	·704	
3	·702	·679	·672	·664	·686	·688	·710	·710	·731	·734	·748	·728	·733	·710	
4	·726	·706	·703	·690	·698	·695	·715	·722	·741	·746	·763	·750	·738	·733	
5	·732	·712	·711	·700	·724	·726	·755	·762	·788	·788	·795	·782	·780	·767	
6	·773	·759	·757	·748	·753	·761	·783	·794	·813	·811	·819	·803	·797	·790	
7	·764	·739	·731	·721	·725	·727	·753	·764	·787	·784	·789	·771	·767	·750	
8	·744	·714	·709	·701	·713	·722	·747	·755	·772	·772	·777	·766	·753	·739	
9	·744	·723	·717	·714	·724	·733	·761	·770	·796	·800	·812	·794	·782	·766	
10	·766	·744	·744	·736	·738	·742	·766	·762	·798	·798	·800	·786	·773	·757	
11	·758	·729	·718	·707	·720	·719	·744	·751	·771	·771	·774	·764	·758	·739	
12	·736	·714	·700	·697	·706	·710	·740	·753	·769	·768	·777	·763	·760	·739	
13	·732	·706	·699	·687	·697	·706	·733	·739	·760	·757	·763	·756	·750	·732	
14	·738	·720	·718	·705	·714	·715	·736	·746	·766	·770	·786	·772	·763	·754	
15	·775	·751	·750	·742	·752	·758	·778	·787	·813	·817	·822	·812	·811	·790	
16	·819	·792	·779	·769	·774	·773	·797	·805	·825	·826	·835	·818	·820	·806	
17	·773	·756	·751	·741	·749	·755	·781	·793	·811	·816	·824	·808	·800	·780	
18	·792	·773	·766	·751	·760	·760	·781	·787	·800	·797	·799	·786	·778	·766	
19	·787	·769	·770	·764	·772	·773	·789	·795	·819	·815	·826	·812	·807	·790	
20	·789	·765	·760	·750	·754	·760	·773	·790	·815	·821	·828	·813	·799	·779	
21	·778	·760	·754	·736	·742	·743	·762	·776	·800	·793	·803	·790	·780	·764	
22	·809	·789	·777	·764	·774	·774	·797	·815	·829	·831	·833	·820	·814	·784	
23	·806	·784	·782	·773	·780	·788	·804	·816	·841	·840	·847	·829	·817	·787	
24	·780	·763	·753	·743	·749	·752	·771	·787	·804	·805	·811	·795	·776	·754	
25	·755	·729	·722	·708	·718	·727	·749	·747	·765	·763	·778	·762	·746	·713	
26	·720	·690	·685	·676	·681	·687	·716	·727	·746	·747	·754	·736	·713	·681	
27	·667	·639	·630	·612	·620	·621	·647	·661	·685	·679	·687	·666	·655	·629	
28	·632	·603	·583	·575	·590	·592	·619	·630	·648	·645	·647	·631	·622	·595	
29	·629	·602	·599	·586	·596	·598	·623	·632	·651	·650	·658	·655	·651	·627	
30	·641	·618	·612	·604	·614	·616	·644	·655	·678	·684	·695	·689	·664	·646	
31	·658	·617	·618	·606	·613	·613	·638	·651	·677	·682	·699	·686	·676	·655	
Mean	29·737	29·714	29·708	29·698	29·708	29·711	29·734	29·744	29·765	29·766	29·774	29·759	29·750	29·730	
Variation	+·004	—·019	—·025	—·035	—·025	—·022	+·001	+·011	+·032	+·033	+·041	+·026	+·017	—·003	

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

JULY. (IN INCHES OF MERCURY AT 32° F.)

Hours.										Mean.	Maximum.		Minimum.		Date.
14—15	15—16	16—17	17—18	18—19	19—20	20—21	21—22	22—23	23—24		Time.	Mag.	Time.	Mag.	
											H. M.		H. M.		
29·651	29·620	29·625	29·613	29·647	29·650	29·668	29·665	29·671	29·655	29·661	10 10	29·705	16 58	29·612	1
·631	·614	·595	·594	·621	·627	·652	·632	·647	·647	·634	22 6	·670	17 0	·590	2
·601	·582	·583	·576	·601	·608	·634	·636	·643	·630	·617	10 10	·678	17 10	·570	3
·598	·572	·568	·564	·589	·596	·624	·626	·631	·626	·604	21 30	·644	17 0	·562	4
·646	·626	·626	·622	·650	·655	·675	·690	·702	·691	·664	22 45	·709	10 55	·583	5
·731	·702	·709	·709	·732	·743	·757	·748	·757	·746	·722	9 25	·772	3 55	·638	6
·689	·659	·673	·664	·688	·688	·707	·706	·714	·704	·712	9 0	·755	17 5	·662	7
·645	·623	·615	·605	·630	·630	·678	·667	·675	·657	·666	8 55	·713	17 0	·595	8
·608	·579	·563	·573	·595	·599	·621	·621	·629	·611	·623	8 8	·673	16 15	·572	9
·560	·540	·540	·547	·568	·576	·606	·612	·622	·607	·587	9 0	·631	16 22	·534	10
·580	·557	·567	·575	·608	·619	·641	·650	·669	·653	·604	22 20	·673	15 40	·551	11
·653	·619	·630	·632	·659	·676	·692	·706	·709	·692	·661	9 20	·721	3 35	·604	12
·697	·645	·651	·658	·688	·703	·721	·732	·732	·726	·698	22 15	·745	3 15	·640	13
·694	·672	·666	·674	·690	·718	·723	·734	·741	·728	·703	21 55	·752	16 40	·662	14
·702	·681	·675	·667	·684	·697	·722	·736	·748	·731	·707	22 5	·750	17 0	·666	15
·687	·673	·674	·673	·703	·704	·726	·727	·733	·724	·704	10 10	·748	16 4	·668	16
·660	·636	·634	·638	·660	·685	·696	·673	·684	·674	·670	9 16	·716	16 25	·632	17
·623	·611	·615	·615	·639	·631	·642	·650	·660	·651	·634	8 45	·667	4 8	·605	18
·640	·615	·609	·609	·631	·638	·656	·662	·668	·649	·636	10 35	·681	4 5	·599	19
·613	·593	·584	·580	·596	·606	·620	·622	·644	·621	·615	10 40	·652	17 10	·578	20
·615	·596	·601	·610	·629	·633	·656	·657	·663	·656	·630	20 50	·688	4 35	·584	21
·673	·657	·647	·656	·673	·685	·708	·723	·730	·715	·678	21 30	·719	2 5	·630	22
·676	·659	·660	·659	·671	·684	·708	·713	·716	·696	·696	9 0	·736	16 35	·656	23
·639	·624	·620	·613	·629	·636	·655	·652	·661	·647	·651	9 50	·749	17 0	·612	24
·648	·636	·642	·651	·676	·680	·702	·712	·719	·709	·682	22 8	·721	3 50	·615	25
·673	·656	·659	·668	·677	·695	·704	·707	·715	·707	·692	22 25	·747	15 50	·654	26
·694	·672	·666	·673	·693	·707	·727	·729	·741	·728	·705	9 40	·743	16 5	·669	27
·698	·682	·684	·688	·714	·730	·753	·757	·768	·748	·715	22 5	·770	4 12	·666	28
·752	·718	·723	·724	·741	·745	·774	·766	·772	·758	·743	9 10	·788	16 55	·695	29
·697	·679	·677	·676	·693	·703	·714	·723	·724	·709	·718	9 15	·777	16 58	·676	30
·50	·633	·632	·632	·652	·654	·666	·670	·682	·665	·670	9 30	·721	16 10	·631	31
29·654	29·634	29·634	29·633	29·655	29·664	29·683	29·688	29·696	29·682	29·666					Mean.
—·012	—·032	—·032	—·033	—·011	—·002	+·017	+·022	+·030	+·016						Varia-tion.

AUGUST.

29·653	29·639	29·650	29·650	29·672	29·684	29·696	29·698	29·704	29·688	29·665	9 20	29·707	2 45	29·612	1
·690	·681	·683	·681	·704	·705	·720	·716	·726	·706	·695	9 28	·729	3 15	·641	2
·702	·690	·692	·699	·708	·711	·723	·731	·740	·728	·709	10 20	·748	3 46	·663	3
·728	·706	·708	·703	·721	·727	·745	·746	·752	·738	·725	10 22	·767	3 50	·687	4
·762	·745	·748	·739	·761	·769	·792	·794	·801	·782	·759	22 5	·799	3 12	·706	5
·779	·758	·759	·761	·761	·767	·782	·785	·798	·779	·772	9 55	·820	3 38	·748	6
·743	·723	·727	·723	·743	·746	·759	·765	·776	·751	·751	9 10	·796	16 30	·717	7
·723	·708	·712	·712	·737	·749	·772	·772	·775	·754	·741	9 7	·719	3 12	·701	8
·759	·747	·748	·744	·760	·760	·780	·790	·787	·771	·762	9 28	·818	3 20	·712	9
·750	·731	·736	·736	·757	·764	·788	·787	·795	·785	·765	9 5	·804	16 40	·726	10
·731	·715	·713	·713	·726	·740	·758	·758	·766	·760	·741	9 58	·784	16 30	·706	11
·727	·716	·710	·711	·728	·738	·757	·751	·756	·740	·735	8 25	·784	3 10	·694	12
·727	·710	·707	·708	·732	·733	·747	·747	·755	·742	·730	9 40	·772	3 50	·688	13
·742	·724	·726	·721	·742	·750	·772	·781	·793	·780	·747	22 0	·800	3 6	·702	14
·779	·767	·766	·768	·794	·802	·821	·826	·836	·820	·791	21 30	·836	2 25	·741	15
·767	·753	·755	·756	·773	·782	·797	·798	·805	·788	·790	10 0	·837	16 58	·747	16
·761	·743	·743	·743	·762	·774	·802	·804	·810	·791	·778	9 10	·826	16 36	·742	17
·755	·732	·742	·738	·749	·753	·776	·784	·793	·783	·771	9 15	·815	16 55	·726	18
·777	·758	·754	·748	·769	·787	·805	·805	·813	·790	·778	8 35	·827	17 5	·753	19
·746	·738	·737	·731	·759	·769	·793	·789	·792	·780	·775	10 0	·836	17 7	·730	20
·749	·736	·739	·741	·756	·777	·805	·812	·825	·812	·772	22 0	·834	3 30	·734	21
·777	·767	·769	·761	·779	·787	·805	·813	·825	·812	·796	8 45	·847	17 8	·759	22
·723	·702	·702	·704	·727	·737	·762	·803	·808	·816	·767	9 8	·855	17 10	·701	23
·742	·718	·718	·718	·741	·744	·766	·770	·781	·765	·763	9 58	·817	16 5	·711	24
·697	·676	·678	·684	·699	·711	·729	·739	·745	·732	·728	10 30	·781	16 35	·676	25
·672	·650	·646	·643	·660	·658	·686	·683	·686	·672	·692	10 5	·756	17 0	·636	26
·624	·608	·607	·610	·620	·631	·647	·647	·651	·639	·644	8 30	·689	16 8	·605	27
·583	·567	·573	·583	·607	·616	·639	·641	·647	·634	·612	9 10	·657	15 55	·568	28
·603	·581	·582	·591	·614	·628	·653	·659	·669	·650	·624	10 0	·673	15 55	·579	29
·632	·607	·606	·612	·628	·640	·668	·680	·692	·678	·648	10 45	·704	16 10	·598	30
·648	·630	·636	·645	·668	·682	·710	·719	·725	·715	·691	21 26	·730	3 25	·692	31
29·720	29·702	29·704	29·703	29·723	29·731	29·751	29·754	29·762	29·747	29·733					Mean.
—·013	—·031	—·029	—·030	—·010	—·002	+·018	+·021	+·029	+·014						Varia-tion.

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

SEPTEMBER. (IN INCHES OF MERCURY AT 32° F.)

Date.	Hours.													
	0–1	1–2	2–3	3–4	4–5	5–6	6–7	7–8	8–9	9–10	10–11	11–12	12–13	13–14
1	29·706	29·688	29·686	29·673	29·683	29·699	29·726	29·742	29·767	29·769	29·781	29·772	29·758	29·749
2	·769	·749	·758	·751	·760	·762	·789	·802	·820	·819	·826	·805	·798	·776
3	·790	·762	·755	·743	·760	·773	·797	·811	·833	·836	·841	·822	·813	·795
4	·823	·797	·787	·780	·792	·798	·821	·833	·857	·848	·843	·825	·811	·783
5	·805	·786	·769	·759	·772	·774	·801	·816	·842	·847	·849	·829	·813	·793
6	·809	·787	·791	·776	·793	·805	·839	·859	·882	·878	·885	·866	·853	·826
7	·841	·823	·818	·821	·837	·840	·863	·874	·897	·893	·906	·892	·893	·876
8	·864	·841	·836	·826	·846	·858	·880	·892	·908	·906	·906	·882	·875	·847
9	·843	·825	·823	·812	·820	·822	·851	·863	·884	·879	·883	·869	·833	·811
10	·805	·785	·776	·766	·780	·782	·803	·816	·837	·838	·846	·827	·817	·795
11	·810	·789	·779	·765	·783	·786	·811	·825	·847	·841	·844	·825	·813	·794
12	·818	·800	·795	·791	·807	·811	·838	·856	·881	·876	·884	·867	·854	·820
13	·829	·813	·803	·794	·813	·821	·847	·866	·889	·890	·888	·860	·842	·821
14	·823	·804	·797	·786	·793	·797	·818	·829	·853	·847	·848	·825	·813	·780
15	·798	·772	·759	·742	·749	·758	·768	·768	·798	·800	·802	·788	·766	·739
16	·746	·720	·703	·687	·701	·707	·728	·739	·766	·781	·787	·763	·758	·725
17	·745	·721	·724	·723	·740	·751	·773	·792	·817	·818	·819	·797	·772	·762
18	·792	·770	·774	·755	·767	·779	·806	·829	·836	·834	·830	·799	·776	·744
19	·759	·729	·719	·722	·733	·734	·761	·775	·798	·831	·826	·774	·755	·733
20	·749	·744	·745	·736	·749	·762	·776	·789	·812	·813	·819	·801	·791	·764
21	·784	·763	·753	·746	·767	·768	·792	·808	·832	·834	·838	·818	·797	·782
22	·764	·764	·764	·759	·770	·774	·792	·805	·828	·832	·826	·803	·786	·767
23	·781	·757	·753	·755	·764	·764	·788	·801	·827	·828	·828	·805	·789	·773
24	·780	·767	·766	·763	·775	·787	·812	·829	·853	·848	·850	·830	·818	·791
25	·818	·794	·787	·776	·792	·802	·827	·844	·866	·866	·870	·849	·838	·819
26	·796	·771	·763	·751	·767	·779	·803	·820	·841	·841	·839	·819	·789	·784
27	·803	·782	·771	·769	·784	·791	·819	·829	·853	·852	·853	·834	·811	·803
28	·807	·791	·791	·776	·803	·815	·838	·849	·874	·870	·868	·843	·824	·791
29	·805	·786	·775	·761	·769	·779	·813	·819	·843	·843	·837	·815	·798	·783
30	·760	·743	·744	·730	·742	·744	·765	·778	·800	·792	·792	·764	·748	·712
Mean .	29·796	29·774	29·769	29·759	29·773	29·780	29·805	29·818	29·842	29·840	29·843	29·821	29·806	29·784
Variation.	+·001	—·021	—·026	—·036	—·022	—·015	+·010	+·023	+·047	+·045	+·048	+·026	+·011	—·011

OCTOBER.

1	29·744	29·723	29·718	29·706	29·722	29·736	29·762	29·772	29·789	29·783	29·783	29·759	29·744	29·728
2	·733	·718	·714	·701	·716	·715	·753	·774	·813	·812	·818	·778	·769	·756
3	·737	·747	·749	·733	·751	·753	·775	·792	·802	·797	·801	·776	·751	·738
4	·737	·715	·713	·700	·730	·737	·767	·779	·804	·797	·804	·785	·767	·736
5	·761	·750	·739	·723	·741	·764	·775	·790	·809	·810	·801	·768	·745	·719
6	·731	·711	·711	·707	·728	·732	·742	·772	·800	·793	·791	·764	·736	·692
7	·752	·734	·723	·705	·728	·733	·766	·779	·802	·799	·795	·771	·744	·728
8	·766	·754	·756	·747	·767	·771	·813	·827	·851	·850	·842	·814	·795	·766
9	·801	·794	·781	·775	·797	·803	·832	·844	·863	·862	·864	·822	·788	·772
10	·784	·768	·763	·752	·766	·778	·808	·821	·844	·844	·846	·819	·794	·766
11	·793	·771	·772	·760	·781	·786	·811	·815	·844	·842	·842	·809	·787	·774
12	·831	·811	·811	·803	·819	·827	·859	·867	·898	·894	·892	·866	·843	·813
13	·852	·830	·826	·810	·833	·833	·860	·863	·887	·883	·891	·862	·829	·813
14	·825	·800	·803	·797	·809	·811	·842	·849	·871	·866	·881	·837	·817	·783
15	·826	·804	·806	·807	·838	·840	·864	·870	·893	·887	·875	·843	·816	·787
16	·816	·805	·805	·804	·813	·823	·843	·853	·865	·865	·862	·843	·825	·795
17	·826	·807	·812	·804	·816	·823	·841	·853	·875	·875	·877	·850	·835	·818
18	·843	·816	·807	·801	·811	·817	·841	·853	·878	·878	·874	·857	·841	·815
19	·866	·845	·846	·838	·848	·858	·891	·908	·933	·937	·930	·908	·884	·854
20	·878	·868	·862	·850	·868	·896	·889	·894	·904	·908	·903	·877	·850	·821
21	·830	·800	·793	·789	·794	·808	·832	·842	·860	·865	·852	·823	·790	·762
22	·761	·745	·761	·746	·761	·760	·783	·792	·815	·812	·797	·766	·730	·695
23	·724	·708	·706	·699	·724	·743	·774	·788	·815	·827	·828	·804	·789	·767
24	·803	·790	·791	·794	·800	·827	·857	·861	·883	·888	·890	·875	·858	·835
25	·872	·856	·854	·849	·842	·866	·880	·882	·903	·914	·901	·877	·854	·829
26	·864	·842	·828	·819	·843	·857	·889	·904	·925	·924	·921	·902	·872	·842
27	·871	·859	·858	·858	·872	·881	·909	·921	·946	·945	·932	·904	·882	·860
28	·890	·865	·867	·867	·873	·883	·909	·921	·945	·948	·945	·916	·893	·866
29	·896	·887	·878	·876	·885	·885	·909	·918	·943	·946	·939	·914	·891	·869
30	·904	·889	·886	·884	·898	·911	·946	·966	·974	·972	·955	·940	·916	·884
31	·925	·908	·906	·900	·921	·931	·954	·963	·979	·981	·971	·948	·920	·892
Mean .	29·815	29·797	29·795	29·787	29·802	29·811	29·838	29·849	29·871	29·871	29·867	29·841	29·818	29·792
Variation.	—·001	—·019	—·021	—·029	—·014	—·005	+·022	+·033	+·055	+·055	+·051	+·025	+·002	—·024

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

SEPTEMBER. (IN INCHES OF MERCURY AT 32° F.)

Hours.										Mean.	Maximum.		Minimum.		Date.
14–15	15–16	16–17	17–18	18–19	19–20	20–21	21–22	22–23	23–24		Time.	Mag.	Time.	Mag.	
											H. M.		H. M.		
29·739	29·726	29·732	29·729	29·747	29·757	29·775	29·776	29·781	29·770	29·739	10 20	29·784	3 25	29·672	1
·760	·750	·756	·758	·781	·790	·810	·812	·817	·799	·784	9 50	·826	15 55	·739	2
·779	·769	·777	·784	·800	·805	·827	·823	·832	·820	·798	8 35	·842	3 10	·747	3
·778	·766	·769	·789	·795	·796	·818	·824	·827	·810	·806	9 45	·859	16 22	·781	4
·790	·772	·786	·789	·809	·817	·837	·830	·827	·816	·806	9 45	·857	3 50	·758	5
·815	·804	·812	·815	·837	·846	·865	·854	·853	·845	·833	8 40	·886	3 25	·775	6
·867	·853	·862	·866	·887	·889	·899	·895	·899	·877	·869	9 45	·907	2 53	·815	7
·844	·834	·839	·842	·859	·868	·884	·876	·876	·853	·864	9 10	·918	3 55	·824	8
·807	·783	·794	·791	·806	·816	·839	·847	·843	·820	·831	,8 40	·885	15 20	·777	9
·791	·773	·785	·793	·819	·825	·844	·848	·847	·828	·809	21 15	·857	4 8	·765	10
·783	·770	·777	·777	·800	·806	·827	·833	·835	·819	·806	9 5	·853	3 45	·763	11
·810	·792	·800	·800	·816	·824	·841	·839	·846	·834	·829	8 15	·864	2 30	·788	12
·796	·775	·791	·795	·817	·818	·843	·839	·845	·825	·830	9 7	·901	16 43	·783	13
·763	·743	·754	·761	·791	·795	·815	·815	·817	·803	·803	9 0	·859	15 35	·743	14
·716	·693	·695	·701	·724	·732	·759	·755	·757	·741	·763	9 35	·809	16 10	·689	15
·713	·700	·709	·714	·736	·743	·763	·761	·762	·745	·736	9 35	·788	3 55	·682	16
·760	·744	·769	·771	·781	·781	·811	·823	·826	·803	·776	22 6	·828	2 5	·706	17
·736	·726	·738	·739	·761	·761	·784	·778	·784	·778	·777	8 25	·840	16 10	·725	18
·722	·707	·716	·717	·741	·747	·770	·777	·781	·767	·751	9 15	·813	16 5	·705	19
·750	·727	·735	·751	·774	·784	·802	·799	·797	·784	·773	9 55	·819	16 12	·719	20
·702	·741	·747	·760	·774	·779	·798	·792	·800	·781	·782	9 35	·840	15 45	·732	21
·744	·723	·732	·739	·762	·771	·796	·797	·805	·792	·779	8 10	·830	15 55	·720	22
·765	·735	·736	·735	·756	·773	·803	·805	·809	·793	·778	10 0	·837	16 56	·731	23
·777	·760	·763	·768	·783	·794	·816	·821	·823	·817	·800	8 35	·855	3 0	·763	24
·801	·780	·782	·777	·794	·798	·818	·819	·819	·806	·814	9 50	·876	2 56	·773	25
·755	·739	·750	·751	·775	·794	·824	·825	·825	·809	·791	9 18	·842	15 25	·733	26
·777	·763	·748	·751	·783	·799	·825	·819	·823	·811	·801	8 50	·859	16 45	·739	27
·767	·742	·746	·761	·784	·798	·816	·811	·821	·809	·808	8 35	·876	16 5	·737	28
·751	·736	·754	·754	·766	·772	·793	·782	·787	·759	·767	9 0	·847	15 50	·731	29
·694	·683	·692	·701	·726	·742	·755	·757	·762	·750	·745	8 30	·801	15 58	·676	30
29·770	29·753	29·762	29·765	29·786	29·794	29·815	29·814	29·818	29·803	29·795					Mean.
—·025	—·042	—·033	—·030	—·009	—·001	+·020	+·019	+·023	+·008						Variation.

OCTOBER.

29·709	29·694	29·698	29·685	29·712	29·717	29·730	29·725	29·736	29·722	·733	8 27	29·798	17 20	·684	1
·754	·732	·743	·743	·774	·786	·801	·799	·797	·778	·761	9 55	·824	3 55	·700	2
·714	·693	·702	·698	·721	·732	·759	·751	·761	·743	·750	8 0	·803	16 20	·691	3
·716	·691	·691	·699	·735	·761	·778	·780	·773	·763	·748	8 53	·805	16 55	·676	4
·697	·692	·696	·696	·733	·741	·759	·757	·748	·728	·747	9 8	·815	15 5	·677	5
·675	·669	·678	·695	·732	·741	·758	·756	·757	·748	·734	8 39	·801	15 35	·663	6
·706	·692	·728	·723	·755	·758	·773	·761	·773	·767	·750	8 55	·803	16 45	·685	7
·754	·741	·751	·761	·790	·799	·822	·811	·813	·811	·791	9 10	·852	16 50	·735	8
·759	·742	·758	·775	·788	·805	·799	·797	·784	·798	·798	9 10	·807	15 50	·741	9
·754	·739	·748	·748	·773	·779	·799	·794	·806	·795	·787	9 40	·847	15 55	·733	10
·750	·738	·756	·755	·794	·807	·837	·837	·845	·829	·797	9 5	·847	15 50	·736	11
·796	·780	·793	·790	·816	·838	·863	·873	·863	·838	·838	9 15	·899	16 55	·775	12
·794	·775	·792	·782	·804	·816	·840	·840	·851	·831	·833	9 15	·892	16 25	·774	13
·777	·760	·781	·786	·810	·824	·849	·844	·850	·838	·821	9 15	·888	16 13	·766	14
·772	·763	·769	·772	·799	·811	·829	·829	·832	·826	·823	8 40	·888	15 55	·761	15
·775	·763	·773	·779	·805	·824	·845	·845	·851	·841	·822	9 15	·873	15 59	·761	16
·795	·780	·796	·797	·830	·847	·866	·866	·867	·858	·834	9 5	·878	15 42	·778	17
·799	·790	·805	·823	·853	·863	·880	·887	·889	·881	·843	9 10	·893	16 50	·787	18
·829	·821	·849	·849	·890	·889	·898	·888	·884	·876	·876	9 5	·943	15 30	·815	19
·803	·790	·793	·798	·823	·838	·847	·848	·849	·839	·852	9 26	·908	16 56	·780	20
·720	·704	·714	·714	·746	·757	·779	·776	·782	·767	·786	20 50	·886	15 10	·709	21
·671	·655	·666	·680	·706	·720	·744	·744	·747	·731	·740	9 0	·822	15 45	·652	22
·738	·728	·757	·764	·788	·794	·806	·816	·821	·803	·771	9 45	·836	3 45	·698	23
·827	·819	·827	·841	·857	·871	·882	·882	·889	·879	·847	9 25	·899	3 15	·789	24
·815	·795	·815	·830	·838	·852	·879	·879	·883	·874	·859	9 5	·922	15 20	·794	25
·822	·810	·818	·815	·840	·867	·873	·869	·877	·873	·861	9 36	·938	16 5	·804	26
·843	·836	·845	·850	·871	·886	·900	·900	·903	·890	·884	8 30	·954	15 55	·834	27
·846	·835	·841	·841	·869	·884	·903	·897	·906	·897	·887	9 22	·953	16 5	·839	28
·847	·835	·845	·846	·869	·885	·909	·910	·917	·909	·892	9 5	·953	15 5	·833	29
·893	·856	·870	·877	·898	·912	·928	·942	·948	·937	·916	9 5	·980	15 55	·855	30
·866	·848	·864	·872	·898	·909	·923	·924	·928	·920	·919	9 22	·988	15 55	·846	31
29·774	29·760	29·773	29·778	29·804	29·815	29·835	29·833	29·837	29·826	29·816					Mean.
—·042	—·056	—·043	—·040	—·012	—·001	+·019	+·017	+·021	+·010						Variation.

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

NOVEMBER. (IN INCHES OF MERCURY AT 32° F.)

Date.	Hours.														
	0—1	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12	12—13	13—14	
1	29·915	29·898	29·893	29·891	29·900	29·906	29·941	29·950	29·973	29·988	29·971	29·930	29·906	29·880	
2	·916	·903	·904	·893	·901	·909	·943	·956	·984	·983	·973	·931	·907	·895	
3	·920	·899	·893	·880	·887	·895	·927	·944	·973	·971	·961	·928	·900	·887	
4	·905	·888	·894	·886	·900	·908	·937	·951	·982	·980	·975	·949	·928	·899	
5	·966	·942	·948	·938	·952	·956	·996	30·002	30·026	30·022	30·016	·984	·964	·930	
6	·956	·939	·938	·923	·947	·951	30·005	·015	·041	·033	·023	·989	·949	·920	
7	·971	·957	·954	·942	·952	·958	29·989	29·999	·024	·021	·010	·986	·947	·916	
8	·927	·912	·909	·895	·910	·919	·951	·961	29·984	29·983	29·970	·940	·908	·890	
9	·916	·901	·909	·900	·911	·917	·953	·969	·997	·990	·982	·946	·920	·899	
10	·917	·891	·883	·869	·871	·869	·901	·906	·925	·927	·920	·885	·849	·825	
11	·845	·825	·814	·817	·830	·831	·850	·862	·904	·902	·892	·865	·840	·812	
12	·875	·854	·859	·855	·868	·870	·904	·910	·931	·930	·928	·900	·878	·837	
13	·874	·863	·859	·844	·863	·871	·893	·902	29·924	·926	·923	·899	·874	·843	
14	·879	·860	·859	·849	·864	·862	·889	·899	·930	·915	·919	·925	·892	·871	·850
15	·876	·858	·857	·845	·861	·860	·889	·896	·920	·919	·917	·889	·866	·839	
16	·848	·855	·855	·845	·863	·871	·900	·912	·945	·947	·941	·912	·883	·846	
17	·876	·858	·859	·847	·861	·862	·905	·915	·940	·940	·929	·900	·872	·849	
18	·900	·890	·892	·879	·892	·895	·927	·935	·959	·957	·951	·932	·890	·848	
19	·929	·914	·919	·910	·926	·923	·967	·977	30·000	·994	·981	·952	·928	·898	
20	·936	·920	·920	·908	·927	·931	·963	·972	·001	·996	·984	·964	·933	·916	
21	·942	·926	·926	·914	·928	·930	·954	·960	·995	30·000	30·001	·976	·958	·931	
22	·973	·954	·955	·934	·957	·964	·998	30·011	·042	·035	·023	·988	·958	·944	
23	·933	·956	·950	·933	·948	·954	·985	29·952	·020	·014	·008	·969	·945	·914	
24	·960	·944	·940	·925	·941	·936	·960	·970	·005	·000	29·994	·963	·941	·922	
25	·975	·959	·955	·941	·953	·949	·995	·999	·030	·026	30·014	·981	·952	·921	
26	·945	·932	·929	·917	·934	·938	·968	·981	·010	·012	·009	·970	·942	·920	
27	·944	·925	·919	·902	·919	·916	·945	·956	29·988	29·981	29·975	·943	·914	·876	
28	·915	·897	·888	·878	·895	·902	·921	·925	·948	·943	·941	·904	·865	·845	
29	·889	·851	·848	·826	·838	·836	·862	·866	·896	·902	·875	·853	·853	·825	
30	·855	·837	·837	·822	·839	·845	·873	·882	·912	·908	·813	·886	·863	·853	
Mean .	29·917	29·900	29·899	29·887	29·901	29·905	29·938	29·947	29·974	29·971	29·966	29·935	29·907	29·880	
Variation.	+·004	—·013	—·014	—·026	—·012	—·008	+·025	+·034	+·061	+·058	+·053	+·022	—·006	—·033	

DECEMBER.

1	29·904	29·891	29·888	29·874	29·892	29·901	29·925	29·934	29·953	29·949	29·949	29·928	29·903	29·868	
2	·920	·905	·909	·899	·909	·9·9	·950	·974	30·009	29·010	30·007	·979	·956	·922	
3	·948	·928	·924	·917	·930	·936	·964	·981	·004	29·994	29·988	·957	·937	·899	
4	·936	·916	·905	·901	·916	·924	·944	·948	29·963	·969	·960	·931	·914	·884	
5	·892	·860	·855	·857	·880	·8·1	·902	·902	·923	·924	·915	·891	·868	·834	
6	·863	·832	·855	·847	·869	·869	·900	·914	·948	·945	·934	·906	·887	·857	
7	·912	·894	·892	·883	·895	·900	·922	·939	·963	·961	·955	·936	·928	·900	
8	·939	·922	·915	·899	·908	·913	·940	·959	·991	·989	·983	·944	·923	·892	
9	·918	·902	·898	·882	·888	·902	·918	·942	·970	·967	·958	·930	·902	·872	
10	·913	·895	·889	·878	·891	·900	·920	·949	·973	·966	·961	·928	·902	·877	
11	·959	·941	·943	·924	·9·9	·958	·987	30·010	30·039	30·033	30·019	·990	·962	·937	
12	·979	·967	·964	·957	·967	·971	30·010	·016	·048	·046	·031	·988	·955	·929	
13	·917	·907	·907	·898	·905	·907	29·927	29·937	29·967	29·967	29·955	·937	·913	·886	
14	·899	·890	·878	·876	·890	·893	·909	·927	·948	·943	·941	·918	·886	·860	
15	·9·7	·895	·899	·887	·909	·916	·949	·964	30·001	30·003	·993	·977	·953	·925	
16	·964	·950	·946	·941	·951	·956	·978	·990	·012	·012	30·010	·982	·952	·916	
17	·914	·918	·911	·9·8	·927	·930	·954	·9·6	29·992	29·992	29·982	·970	·944	·914	
18	·932	·927	·919	·923	·934	·943	·963	30·011	30·017	30·017	30·017	·983	·961	·934	
19	·992	·976	·972	·974	·984	·994	30·022	30·042	·068	·068	·062	30 ·034	30·002	·910	
20	·882	·903	·861	·951	·961	·963	29·991	·013	·041	·041	·041	·013	29·991	·910	
21	·986	·979	·967	·958	·972	·978	·999	·019	·061	·063	·062	·033	30·001	·964	
22	30·006	·986	·981	·966	·983	·985	30·004	·015	·041	·043	·034	·004	29·963	·944	
23	29·967	·933	·921	·911	·923	·925	29·975	29·966	·002	·007	29·997	29·967	·934	·901	
24	·925	·906	·902	·894	·904	·906	·926	·948	29·984	29·994	·996	·967	·934	·914	
25	·937	·922	·909	·894	·903	·905	·927	·945	·979	·981	·976	·953	·923	·903	
26	·896	·882	·865	·860	·866	·863	·877	·877	·918	·925	·921	·893	·861	·819	
27	·863	·853	·843	·823	·858	·861	·895	·905	·933	·933	·924	·913	·883	·858	
28	·911	·901	·897	·883	·897	·908	·943	·959	·994	·994	·989	·966	·933	·912	
29	·942	·922	·918	·910	·918	·923	·942	·957	·978	·974	·964	·935	·905	·880	
30	·892	·889	·883	·871	·873	·879	·906	·921	·949	·971	·963	·939	·910	·885	
31	·917	·910	·911	·905	·917	·928	·967	·981	·983	·30·007	·30·005	·967	·949	·919	
Mean .	29·930	29·916	29·911	29·902	29·914	29·920	29·946	29·961	29·989	29·990	29·984	29·957	29·930	29·901	
Variation.	+·001	—·013	—·018	—·027	—·015	—·009	+·017	+·032	+·060	+·061	+·055	+·028	+·001	—·028	

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

NOVEMBER. (IN INCHES OF MERCURY AT 32° F.)

Hours.										Mean.	Maximum.		Minimum.		Date.
14—15	15—16	16—17	17—18	18—19	19—20	20—21	21—22	22—23	23—24		Time.	Mag.	Time.	Mag.	
											H. M.		H. M.		
29·863	29·850	29·861	29·863	29·855	29·905	29·931	29·929	29·937	29·919	29·911	8 50	29·978	15 56	29·842	1
·887	·873	·883	·887	·915	·919	·939	·937	·947	·933	·922	9 0	·986	16 0	·870	2
·881	·855	·869	·869	·891	·899	·921	·911	·921	·909	·906	9 5	·974	15 0	·852	3
·890	·871	·889	·890	·913	·924	·955	·953	·969	·956	·925	9 10	·984	15 15	·868	4
·919	·902	·908	·923	·937	·952	·952	·952	·963	·952	·927	9 10	·987	16 10	·889	5
·912	·887	·904	·906	·940	·951	·972	·977	·982	·968	·959	9 0	·042	15 30	·886	6
·899	·883	·888	·888	·916	·925	·940	·942	·948	·934	·949	8 45	·023	16 20	·879	7
·871	·851	·860	·861	·898	·909	·934	·934	·932	·917	·918	8 38	29·985	16 30	·845	8
·879	·862	·869	·874	·903	·911	·933	·931	·938	·921	·921	8 45	·998	16 10	·854	9
·804	·793	·814	·807	·836	·854	·878	·867	·864	·849	·867	8 36	·938	15 15	·790	10
·803	·793	·806	·805	·833	·846	·870	·876	·889	·873	·846	9 0	·906	15 50	·787	11
·820	·805	·820	·829	·854	·873	·894	·890	·901	·881	·873	9 20	·932	15 30	·800	12
·833	·820	·840	·841	·859	·879	·892	·889	·896	·880	·873	8 45	·928	15 30	·812	13
·834	·824	·841	·839	·875	·877	·897	·893	·893	·880	·874	9 35	·926	15 22	·821	14
·825	·810	·830	·834	·861	·876	·899	·891	·890	·870	·870	9 30	·921	14 58	·805	15
·828	·815	·834	·840	·866	·871	·900	·894	·898	·880	·878	9 12	·948	16 5	·815	16
·840	·822	·837	·843	·878	·891	·914	·906	·911	·896	·883	8 45	·947	15 17	·821	17
·855	·845	·867	·866	·898	·909	·940	·940	·947	·932	·911	9 5	·981	15 35	·844	18
·835	·875	·895	·895	·920	·924	·942	·942	·949	·934	·933	8 44	30·001	16 10	·872	19
·906	·892	·914	·916	·942	·943	·967	·962	·966	·946	·943	8 40	·002	15 56	·896	20
·923	·919	·941	·945	·973	·973	·994	·993	·999	·980	·959	8 36	·046	15 10	·911	21
·935	·924	·937	·942	·968	·976	·997	·997	30·007	·988	·975	8 35	·045	15 52	·918	22
·911	·898	·912	·921	·948	·958	·977	·973	29·978	·966	·959	8 46	·021	15 5	·891	23
·918	·911	·930	·922	·956	·967	·992	·990	·993	·972	·956	8 55	·006	16 20	·905	24
·918	·904	·917	·924	·956	·965	·988	·978	·978	·952	·964	8 55	·021	16 12	·901	25
·901	·881	·893	·891	·918	·926	·953	·953	·964	·943	·943	8 40	·013	15 52	·880	26
·885	·848	·862	·863	·886	·895	·920	·914	·933	·913	·917	9 0	29·995	15 20	·847	27
·831	·809	·816	·822	·853	·859	·877	·873	·883	·858	·882	8 50	·867	15 50	·808	28
·812	·802	·820	·824	·850	·855	·871	·865	·873	·855	·853	9 10	·910	15 0	·801	29
·846	·827	·847	·848	·883	·886	·908	·906	·917	·896	·876	21 38	·924	3 55	·826	30
29·869	29·855	29·869	29·872	29·900	29·909	29·932	29·929	29·936	29·919	29·913					Mean.
—·044	—·058	—·044	—·041	—·013	—·004	+·019	+·016	+·023	+·006						Veris tion.

DECEMBER.

29·864	29·854	29·853	29·874	29·851	29·901	29·919	29·919	29·929	29·916	29·902	8 58	29·954	16 30	29·846	1
·912	·896	·907	·914	·926	·941	·971	·962	·968	·952	·943	8 52	30·010	15 20	·887	2
·893	·881	·893	·899	·923	·932	·954	·953	·958	·935	·939	8 22	·005	15 45	·873	3
·862	·843	·848	·855	·881	·892	·923	·922	·918	·895	·910	9 16	29·970	15 53	·838	4
·822	·813	·818	·829	·862	·874	·885	·885	·884	·856	·873	8 37	·928	16 20	·804	5
·850	·839	·856	·864	·893	·914	·941	·939	·929	·917	·891	9 5	·950	15 29	·831	6
·892	·875	·895	·905	·938	·962	·962	·980	·976	·952	·927	20 35	·970	15 10	·872	7
·840	·827	·873	·873	·899	·920	·933	·931	·929	·915	·923	9 45	·990	15 35	·855	8
·868	·847	·860	·874	·900	·909	·930	·932	·938	·918	·910	8 36	·971	14 48	·844	9
·859	·865	·881	·890	·913	·931	·953	·948	·960	·939	·919	8 25	·974	15 47	·859	10
·819	·817	·831	·847	·871	·889	30·004	30·000	·996	·977	·971	8 40	30·040	14 32	·003	11
·848	·832	·890	·896	·916	·920	29·938	29·934	·934	·918	·956	8 30	·044	15 40	·872	12
·863	·856	·853	·866	·887	·900	·918	·919	·916	·905	·908	8 55	29·958	15 50	·843	13
·840	·828	·846	·848	·873	·890	·911	·924	·918	·904	·894	8 40	·954	15 55	·826	14
·913	·896	·911	·913	·940	·949	·974	·985	·981	·970	·942	9 5	30·005	3 45	·889	15
·892	·870	·878	·884	·904	·920	·941	·940	·939	·921	·944	9 30	·014	15 45	·866	16
·892	·882	·888	·884	·913	·921	·944	·936	·938	·932	·930	9 30	29·996	15 50	·878	17
·918	·904	·925	·914	·936	·943	·963	·963	30·003	·982	·960	9 15	30·033	15 47	·902	18
·913	·918	·922	·922	·953	·962	·988	·993	·004	·993	·989	9 15	·078	16 5	·916	19
·920	·910	·913	·921	·955	·956	·985	·989	29·999	·993	·975	9 30	·049	16 12	·906	20
·942	·923	·931	·935	·964	·981	30·013	30·017	30·017	30·001	·990	8 55	·067	15 35	·921	21
·919	·905	·916	·925	·956	·967	29·987	29·993	29·987	29·965	·973	9 10	·047	15 45	·904	22
·885	·877	·897	·902	·927	·943	·955	·955	·953	·941	·939	9 5	·008	15 0	·872	23
·891	·880	·884	·894	·914	·931	·954	·956	·948	·938	·929	9 35	·004	16 20	·874	24
·885	·873	·883	·875	·894	·903	·922	·922	·910	·919	·916	9 35	29·987	15 48	·863	25
·813	·803	·822	·828	·844	·853	·880	·885	·887	·874	·867	9 40	·929	15 47	·807	26
·845	·836	·846	·851	·875	·883	·906	·906	·906	·891	·881	9 40	·941	3 50	·831	27
·902	·894	·912	·921	·942	·954	·974	·974	·965	·951	·936	9 10	30·007	3 50	·879	28
·865	·850	·862	·873	·895	·899	·918	·912	·907	·899	·915	8 50	29·980	16 10	·848	29
·873	·859	·877	·886	·914	·925	·939	·943	·929	·921	·909	9 30	·973	15 52	·858	30
·909	·898	·905	·908	·929	·940	·960	·958	·950	·935	·940	9 35	30·011	15 50	·891	31
29·885	29·873	29·883	29·890	29·915	29·927	29·949	29·949	29·949	29·936	29·929					Mean.
—·044	—·056	—·046	—·039	—·014	—·003	+·020	+·020	+·020	+·006						Varia- tion.

RAINFALL (IN INCHES), 1928.

(Totals for periods of sixty minutes from full hour to full hour of local mean time.)

JUNE. (FROM PLUVIOGRAPH RECORDS.)

Date.	Hours.													
	0–1	1–2	2–3	3–4	4–5	5–6	6–7	7–8	8–9	9–10	10–11	11–12	12–13	13–14
1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
2	..	..	..	..	..	..	..	..	..	..	..	..	..	..
3	..	..	..	..	..	..	..	..	..	..	..	..	..	..
4	..	..	..	..	..	..	..	..	..	..	..	..	..	..
5	..	..	..	..	..	..	..	..	..	..	..	..	..	..
6	..	..	..	..	..	..	..	..	..	0·01	..	..	..	..
7	..	..	..	..	..	..	..	..	..	..	..	..	..	..
8	..	..	..	..	..	..	..	..	..	..	..	..	..	0·01
9	..	..	..	..	..	..	..	..	..	0·01	..	..	..	..
10	..	0·05	0·08	0·07	..	0·34	0·72	0·09	0·09	0·04	..	0·18	0·07	0·01
11	..	0·01	0·01	0·01	0·01	0·11	..	..	..	..	..	0·06	2·31	0·54
12	0·19	2·01	1·08	0·14	0·07	0·02	..	..	..	0·02	..	..	..	0·88
13	0·18	0·82	1·14	0·93	0·19	0·76	0·25	0·26	0·13	0·05	..	..	..	0·01
14	..	0·17	0·10	..	..	..	..	..	..	..	..	..	..	..
15	..	..	..	..	..	..	..	..	..	..	..	..	..	..
16	..	..	..	..	..	..	..	..	0·08	0·26	..	..	..	..
17	..	..	..	..	..	..	..	..	..	..	..	..	..	..
18	..	..	..	..	..	..	..	..	..	..	..	..	..	..
19	..	..	..	..	..	..	..	..	..	..	..	..	..	..
20	..	..	0·12	0·03	..	..	..	..	0·04	0·40	0·79	0·02	..	0·03
21	..	..	..	..	..	..	..	..	..	..	..	..	..	..
22	..	..	..	..	..	0·01	0·01	..	..	..	..	..	..	..
23	..	..	..	..	..	..	..	0·06	..	..	0·22	0·01	..	..
24	..	..	..	0·01	..	..	..	..	..	..	..	..	..	..
25	0·18	..	0·03	0·03	..	..	..	..	..	..	..	0·20	..	..
26	..	0·01	0·16	0·34	0·19	0·02	..	..	..	..	..	0·02	..	..
27	..	..	..	..	0·02	..	..	..	..	..	..	..	..	..
28	..	..	..	..	..	..	0·05	0·13	..	..	..	..	..	..
29	..	..	..	..	0·23	0·86	0·15	0·03	..	..	2·36	0·17	0·03	0·03
30	..	..	..	..	..	..	..	..	..	..	..	0·12	0·01	0·61
Total	0·52	3·07	2·72	1·58	0·62	2·12	1·18	0·57	0·34	0·79	3·37	0·78	2·42	2·12

JULY.

1	..	..	..	..	..	0·13	..	..	..	..	..	..	..	..
2	..	..	..	..	..	0·02	0·01	..	0·05	0·02	0·02	0·01	0·16	0·04
3	0·38	0·50	0·09	0·10	0·48	0·16	0·40	0·78	0·51	0·23	0·08	0·04	..	..
4	0·32	0·21	0·18	..	..	..	..	0·05	0·02	0·14	0·05	0·06	0·06	0·08
5	0·45	0·01	..	..	0·04	..	..	0·03	..	..	..	..	..	0·04
6	0·01	..	..	..	..	..	..	..	..	..	..	..	..	..
7	..	..	..	..	..	..	..	..	..	..	..	..	..	..
8	..	..	..	..	..	..	..	..	..	..	..	..	..	..
9	..	..	..	..	..	..	..	..	..	..	0·01	..	..	..
10	..	..	..	..	..	..	..	..	..	..	..	..	..	..
11	..	0·02	0·12	0·17	..	0·01	..	..	..	..	..	0·03	..	..
12	0·06	0·03	..	0·01	0·06	0·01	..	0·52	0·59	0·90	0·42	0·18	0·27	0·19
13	..	..	..	..	..	..	..	..	..	0·02	..	..	..	..
14	..	..	..	0·08	..	..	..	..	..	..	..	..	..	..
15	..	..	..	0·06	..	..	..	..	..	..	..	..	..	..
16	..	0·01	0·03	0·11	0·01	..	..	..	..	..	0·11	..	..	..
17	..	..	..	..	..	..	..	..	..	..	..	..	..	..
18	..	..	0·04	..	..	..	..	0·18	0·12	0·04	..	0·32	0·24	0·02
19	0·38	0·17	0·10	0·02	0·10	0·40	0·28	0·35	0·56	0·04	0·04	0·65	0·36	0·02
20	0·01	..	0·06	0·02	0·02	0·35	0·49	0·08	0·05	0·16	0·40	0·06	0·02	0·09
21	0·03	0·53	0·08	0·11	0·03	0·30	0·12	0·02	0·02	0·01	..	..	..	..
22	..	0·02	..	..	..	..	..	..	..	..	..	..	..	0·08
23	..	0·06	0·06	..	0·01	..	..	..	..	..	..	0·10	0·03	..
24	0·07	0·04	0·01	..	0·07	0·09	0·02	0·11	..	0·05	0·09	..	..	..
25	0·02	..	..	..	0·03	..	..	..	..	..	..	..	..	..
26	..	..	..	..	..	..	..	..	..	0·01	0·14	0·08	..	0·01
27	..	..	..	..	..	..	..	0·10	..	..	..	..	0·04	0·01
28	0·09	0·10	..	..	..	0·03	..	..	..	..	..	0·02	..	..
29	..	0·01	0·04	..	0·01	..	..	0·07	..	..	..	0·13	..	..
30	0·08	..	..	..	..	0·09	0·07	..	..	..	..	..	0·01	..
31	..	..	..	..	..	..	..	..	..	..	..	0·04	0·01	..
Total ..	1·60	1·73	0·81	0·68	0·86	1·56	1·42	2·28	1·92	1·62	1·96	2·22	1·20	0·58

RAINFALL (IN INCHES), 1928.

(Totals for periods of sixty minutes from full hour to full hour of local mean time.)

JUNE. (FROM PLUVIOGRAPH RECORDS.)

Hours.										Daily Total.	Maximum fall in one hour.	Time of occurrence.	Daily* total by Newman.	Date.
14–15	15–16	16–17	17–18	18–19	19–20	20–21	21–22	22–23	23–24					
												H. to H.		
..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
..	..	..	..	..	..	..	..	..	..	..	..	..	..	3
..	..	..	..	..	..	..	..	..	..	..	..	..	..	4
..	..	..	..	..	..	..	..	..	..	..	..	..	..	5
..	..	..	..	..	..	..	..	..	..	0·01	0·01	9 10	0·01	6
..	..	..	..	..	..	..	..	..	0·11	0·11	0·11	22 23	0·13	7
..	..	..	..	..	..	..	..	..	..	0·01	0·01	13 14	0·01	8
..	..	..	..	..	..	..	..	..	..	0·01	0·07	9 10	0·01	9
..	..	..	..	..	..	0·29	0·01	..	..	2·00	0·72	6 7	2·08	10
0·01	0·01	0·03	0·01	..	..	..	..	..	..	3·12	2·31	12 13	3·22	11
1·34	1·04	0·19	0·30	0·32	0·23	0·10	0·22	0·09	0·59	8·83	2·01	1 2	8·96	12
..	0·02	..	..	0·08	0·06	..	..	..	..	4·76	1·14	2 3	4·87	13
..	..	..	0·01	..	0·01	..	..	..	..	0·29	0·17	1 2	0·29	14
..	..	..	..	..	..	..	..	..	..	..	..	..	..	15
..	..	..	..	..	..	..	0·01	..	..	0·35	0·26	9 10	0·36	16
..	..	..	..	..	..	..	..	..	..	..	..	..	..	17
..	..	..	..	0·01	0·01	0·06	..	..	..	0·08	0·06	20 21	0·09	18
..	..	..	..	..	..	..	..	..	..	..	..	..	..	19
0·01	0·01	..	..	..	..	..	..	..	..	1·45	0·79	10 11	1·51	20
..	..	..	..	..	..	0·13	0·04	..	..	0·17	0·13	20 21	0·21	21
..	..	..	..	..	..	..	..	..	0·01	0·03	0·01	5 6	0·03	22
..	..	..	..	..	..	..	0·01	..	..	0·30	0·22	10 11	0·30	23
..	..	..	..	..	0·09	..	..	..	..	0·10	0·09	19 20	0·12	24
..	..	..	..	..	..	0·01	..	..	..	0·45	0·20	11 12	0·46	25
..	..	..	..	..	..	..	..	..	..	0·74	0·34	3 4	0·78	26
..	..	..	..	..	..	..	..	..	..	0·02	0·02	4 5	0·03	27
..	..	..	..	..	..	..	..	..	..	0·18	0·13	7 8	0·18	28
0·02	0·02	0·01	0·01	..	..	..	..	..	..	3·92	2·36	10 11	4·06	29
0·01	..	..	..	..	..	..	..	..	..	0·75	0·61	13 14	0·75	30
1·39	1·10	0·23	0·33	0·41	0·40	0·55	0·29	0·20	0·60	27·68	..	..	28·46	Total

JULY.

..	..	..	..	0·03	..	..	..	0·05	0·01	0·22	0·13	5 6	0·24	1
..	0·33	..	..	0·05	0·02	0·03	0·07	0·36	0·07	1·26	0·36	22 23	1·28	2
0·06	0·02	0·06	..	0·21	0·27	0·19	0·21	0·36	0·08	5·21	0·78	7 8	5·29	3
0·02	..	..	0·17	0·12	0·02	0·32	0·40	0·05	0·62	2·80	0·62	23 24	2·94	4
0·14	..	..	..	..	..	..	..	..	0·03	0·74	0·45	0 1	0·76	5
..	..	..	..	..	..	..	..	..	..	0·01	0·01	0 1	0·01	6
..	..	..	..	..	..	..	..	..	..	..	..	..	..	7
..	..	..	..	..	..	..	..	..	..	..	..	..	..	8
..	..	..	..	..	..	..	..	..	..	0·01	0·01	10 11	0·01	9
..	..	..	..	..	..	0·07	0·01	..	..	0·08	0·07	20 21	0·07	10
0·01	..	..	..	..	..	..	0·01	0·02	0·07	0·46	0·17	3 4	0·47	11
0·01	0·01	..	..	0·01	..	..	..	..	..	3·26	0·90	9 10	3·28	12
..	..	..	..	..	..	..	..	..	..	0·02	0·02	9 10	0·02	13
..	..	..	..	..	..	..	..	..	..	0·08	0·03	3 4	0·08	14
..	..	0·02	..	..	..	..	..	..	..	0·03	0·06	3 4	0·08	15
..	..	..	..	..	..	..	..	..	..	0·27	0·11	3 4	0·28	16
0·02	0·02	..	0·04	..	..	0·15	0·01	..	..	0·24	0·15	20 21	0·26	17
0·03	0·29	0·11	0·03	0·33	0·10	0·08	0·03	..	0·20	2·67	0·92	11 12	2·71	18
..	..	..	0·03	..	..	0·09	0·08	0·07	..	4·01	0·65	11 12	4·03	19
0·02	..	..	..	..	..	0·03	1·00	0·19	0·55	3·58	1·00	21 22	3·62	20
..	0·04	0·12	0·08	..	..	..	0·02	0·12	0·01	1·59	0·23	1 2	1·62	21
..	..	..	0·12	0·01	..	..	0·20	..	..	0·43	0·20	21 22	0·43	22
..	..	..	..	..	0·01	..	..	..	0·02	0·32	0·10	11 12	0·35	23
..	..	..	0·02	..	..	0·09	0·08	0·02	0·08	0·82	0·11	7 8	0·87	24
..	..	..	..	..	..	..	..	..	..	0·05	0·03	4 5	0·04	25
0·08	..	0·02	..	..	..	..	..	..	..	0·24	0·14	10 11	0·24	26
0·02	0·01	..	0·03	..	..	..	..	..	0·07	0·25	0·10	7 8	0·28	27
..	..	..	..	..	..	..	..	..	..	0·24	0·10	1 2	0·23	28
..	..	..	0·02	..	..	0·01	..	0·02	..	0·31	0·13	11 12	0·31	29
..	0·04	..	..	..	..	..	..	0·02	..	0·31	0·09	5 6	0·31	30
..	..	..	..	0·01	..	..	..	..	..	0·06	0·04	11 12	0·06	31
0·41	0·76	0·33	0·49	0·76	0·43	1·06	2·12	1·28	1·79	29·87	..	..	30·24	Total.

* Adopted as the standard instrument in the Observatory since 1915.

(Totals for periods of sixty minutes from full hour to full hour of local mean time.)

AUGUST.

(FROM PLUVIOGRAPH RECORDS.)

Date.	Hours.													
	0–1	1–2	2–3	3–4	4–5	5–6	6–7	7–8	8–9	9–10	10–11	11–12	12–13	13–14
1	0·02	0·01	..	..	0·01	..	..	..	..	..	..	0·05	..	..
2	..	..	..	..	..	..	..	..	..	..	..	..	..	..
3	0·01	0·02	..	0·01	..	..	..	..	0·02	0·01	..	..	..	..
4	..	..	..	..	..	..	..	..	..	..	..	..	..	..
5	..	..	0·02	..	..	..	..	..	..	..	..	..	..	..
6	..	..	..	..	..	..	..	..	..	..	..	..	..	..
7	..	..	..	..	..	..	..	..	..	0·01	..	..	..	..
8	0·03	..	0·01	0·01	..	0·01	..	..	0·01	..	0·03	0·01	0·02	..
9	0·01	..	0·08	..	..	..	..	..	..	..	..	0·03	..	..
10	..	..	..	..	..	..	..	..	..	..	..	..	..	0·01
11	..	..	..	..	0·03	0·01	..	..	..	..	..	..	..	..
12	..	..	..	0·01	0·01	0·04	..	..	0·04	0·01	..	..	..	..
13	..	..	0·03	0·01	0·02	0·04	..	..	0·07	..	..	..	..	..
14	..	..	0·02	..	0·02	..	..	0·10	..	..	..	..	..	..
15	0·01	..	..	..	..	..	..	..	..	..	..	..	..	..
16	..	..	..	0·02	0·01	0·05	0·16	0·51	0·01	..	..	..	..	..
17	..	..	..	..	..	0·07	0·05	..	..	..	..	..	..	..
18	..	..	..	..	..	..	..	..	..	..	..	..	..	..
19	..	..	..	..	..	..	..	..	..	..	..	..	..	..
20	..	..	..	..	..	..	..	..	..	..	..	..	..	..
21	..	..	..	..	0·01	..	..	..	..	..	..	0·03	..	..
22	0·09	..	..	0·02	0·13	0·01	..	..	..	..	..	..	0·34	0·01
23	0·01	..	..	0·01	..	..	0·03	0·01	..	..	..	0·03	..	..
24	..	0·04	..	0·01	..	0·05	0·01	0·01	..	0·05	0·03	0·02	..	..
25	..	..	..	..	..	..	..	..	0·01	0·01	0·02	0·21	0·01	..
26	..	..	..	0·10	0·03	0·03	0·05	0·01	..	0·03	0 03	0·31	0·17	0·21
27	..	..	..	0·15	0·02	0·04	..	..	0·05	0·14	0 01	0·05	0·01	0·04
28	0·01	0·43	1·32	0·55	0·34	0·32	0 11	0·19	0·10	0·07	0·03	0·05	1·14	0·52
29	..	..	0·01	0·06	0·06	..	..	..	..	..	0·15	0·04	0·10	0 12
30	..	0·01	..	0·03	0·01	..	..	..	0·01	..	0·02	0·03	..	..
31	0·07	0·01	..	..	..	0·04	..	..	..	..	..	..	..	..
Total ..	0·26	0·52	1·50	0·99	0·71	0·71	0·41	0·83	0·32	0·33	0·32	0·83	1·79	0·91

SEPTEMBER.

1	..	0·01	0·01	..	..	..	..	..	..	..	..	..	..	..
2	..	..	..	..	..	..	..	..	..	..	..	..	..	..
3	..	..	..	..	..	..	..	..	..	..	..	..	..	..
4	..	..	..	..	..	..	..	..	..	..	..	..	..	..
5	..	..	..	..	..	0·02	0·01	..	..	..	..	..	..	..
6	..	..	..	..	..	..	..	..	..	..	..	..	..	..
7	..	..	..	..	..	..	..	..	..	..	..	..	..	..
8	..	..	..	..	..	..	..	..	..	..	..	..	..	..
9	..	0·01	..	..	..	..	..	..	..	..	..	..	..	..
10	0·01	..	..	..	..	..	..	..	..	..	..	..	..	0·03
11	..	..	..	..	..	..	..	..	..	..	..	..	..	..
12	..	..	..	0·05	0·07	..	..	0·02	0·29	..	..	0·29	..	..
13	..	..	..	..	0·02	0·02	..	0·41	0·30	0·04	..	..	..	..
14	..	..	..	..	..	..	..	..	..	..	..	..	..	..
15	..	..	0·17	0·71	0·08	..	..	..	..	..	..	..	..	..
16	0·01	0·04	0·02	..	..	..	..	..	..	0·07	0·02	0·05	0·01	0·02
17	..	..	0·01	..	..	..	..	..	0·01	..	..	..	0·01	0·04
18	..	..	..	..	..	..	..	..	..	..	..	..	..	..
19	0·05	0·13	0·22	0·52	0·17	0·12	0·05	0·06	0·03	0·58	..	0·10	..	..
20	0·08	..	..	0·01	0·01	0·02	..	0·16	..	..	..	..	0·25	0·22
21	0·04	0·02	0·01	0·01	0·01	0·02	0·01	0·04	0·09	0·02	..	..	..	..
22	0·01	..	0·11	..	0·11	0·04	..	..	..	..	..	..	..	..
23	..	..	..	..	..	..	..	..	..	0·01	..	..	0·07	0·01
24	..	..	..	..	..	..	..	..	..	..	..	..	..	..
25	..	..	..	..	..	..	..	..	..	..	..	..	..	..
26	..	..	..	..	..	..	..	..	..	..	..	..	..	..
27	..	..	..	..	..	..	..	..	..	..	..	..	..	..
28	..	..	..	..	..	..	..	..	..	..	..	..	..	..
29	..	..	..	..	..	..	..	..	..	..	..	..	..	0·02
30	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total .	0·20	0·21	0·55	1·30	0·45	0·24	0·07	0·69	0·72	0·72	0·02	0·45	0·34	0·34

(Totals for periods of sixty minutes from full hour to full hour of local mean time.)

AUGUST.

(FROM PLUVIOGRAPH RECORDS.)

Hours.										Daily total.	Maximum fall in one hour.	Time of occurrence.	Daily* total by Newman.	Date.
14–15	15–16	16–17	17–18	18–19	19–20	20–21	21–22	22–23	23–24			H. to H.		
0·08	0·01	..	..	..	..	..	..	..	0·04	0·22	0·08	14 15	0·22	1
..	..	..	..	0·05	..	..	..	0·01	..	0·06	0·05	18 19	0·05	2
..	..	..	..	..	..	..	..	..	..	0·07	0·02	1 2	0·08	3
..	..	..	..	..	..	..	..	..	..	..	..	..	..	4
..	..	..	..	..	..	..	..	..	..	0·02	0·02	2 3	0·02	5
..	..	0·01	0·01	..	..	..	..	..	..	0·02	0·01	16 17	0·02	6
..	..	..	..	..	..	..	..	..	..	0·01	0·01	9 10	0·01	7
..	..	0·01	..	0·01	0·13	0·20	0·12	..	0·02	0·62	0·20	20 21	0·63	8
..	..	0·1	..	..	..	..	0·04	..	..	0·16	0·08	2 3	0·15	9
..	..	..	..	..	..	..	..	0·09	..	0·10	0·09	22 23	0·10	10
..	..	..	..	..	..	..	..	..	..	0·04	0·03	4 5	0·04	11
..	0·02	..	0·04	0·01	..	..	..	..	..	0·18	0·04	5 6	0·19	12
..	..	..	0·05	0·01	0·10	0·14	..	..	..	0·48	0·14	20 21	0·49	13
..	..	..	..	..	..	..	0·02	..	..	0·17	0·10	7 8	0·17	14
..	..	..	..	..	..	..	..	..	..	0·01	0·01	0 1	0·01	15
..	0·01	..	..	..	..	..	..	..	..	0·76	0·51	7 8	0·77	16
..	..	..	..	..	..	..	..	..	..	0·13	0·07	5 6	0·14	17
..	..	..	..	..	..	..	..	..	..	..	..	..	..	18
..	..	..	..	..	..	..	..	..	..	..	..	..	..	19
..	..	..	..	..	..	..	..	..	..	..	..	..	..	20
..	..	..	..	..	..	..	..	..	..	0·01	0·01	4 5	0·01	21
..	..	..	..	0·04	..	..	..	..	..	0·64	0·34	12 13	0·66	22
..	..	..	..	0·09	..	..	..	..	0·18	0·36	0·18	23 24	0·39	23
..	..	0·01	0·02	..	..	..	..	..	..	0·25	0·05	5 6	0·25	24
..	..	0·07	0·03	..	0·09	..	..	..	..	0·45	0·21	11 12	0·46	25
0·17	0·13	0·09	0·05	0·02	0·05	..	..	..	..	1·48	0·31	11 12	1·51	26
0·89	0·34	0·17	0·12	0·09	0·05	0·46	0·17	0·33	0·15	3·32	0·89	14 15	3·30	27
0·01	0·07	0·03	0·26	0·12	0·08	0·02	..	..	..	5·75	1·32	2 3	5·86	28
0·11	0·04	0·01	..	..	..	..	..	..	..	0·70	0·15	10 11	0·69	29
..	..	0·01	..	..	0·08	..	0·02	0·02	..	0·24	0·08	19 20	0·25	30
..	0·11	..	..	..	..	0·01	..	..	..	0·24	0·11	15 16	0·22	31
1·26	0·77	0·41	0·58	0·44	0·56	0·83	0·37	0·45	0·39	16·49	..	..	16·69	Total.

SEPTEMBER.

..	0·01	0·01	..	..	..	..	..	..	..	0·04	0·01	1 2	0·04	1
..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
..	..	..	..	..	..	..	..	..	..	..	..	..	..	3
..	..	..	..	..	..	..	..	..	..	..	..	..	..	4
..	..	..	..	..	..	..	..	..	..	0·03	0·02	5 6	0·03	5
..	..	..	..	..	..	..	..	..	..	..	..	..	..	6
..	..	..	..	..	..	..	..	..	0·05	0·06	0·05	23 24	0·06	7
..	..	..	..	..	..	0·08	..	..	..	0·08	0·06	20 21	0·08	8
..	..	..	..	..	..	..	0·20	..	..	0·21	0·20	21 22	0·21	9
..	..	..	..	0·06	..	..	..	..	..	0·10	0·06	18 19	0·10	10
..	..	..	..	..	..	..	..	..	..	..	..	..	..	11
..	..	..	..	..	..	..	..	..	..	0·72	0·29	8 9	0·72	12
..	..	0·01	..	..	..	..	..	..	..	0·80	0·41	7 8	0·82	13
..	..	..	..	..	..	..	..	..	..	..	..	..	..	14
..	..	..	..	..	0·06	..	..	..	..	1·00	0·71	3 4	1·02	15
0·01	0·03	0·01	..	..	..	..	..	..	..	0·30	0·07	15 16	0·31	16
0·55	0·23	0·08	0·38	0·02	..	..	..	..	..	1·93	0·68	16 17	1·94	17
..	..	..	..	..	0·01	..	0·02	0·27	0·21	0·51	0·27	22 23	0·52	18
..	..	..	..	..	..	..	..	..	..	2·02	0·58	9 10	2·054	19
..	..	..	0·01	0·03	0·05	0·05	0·03	..	0·06	0·97	0·35	12 13	1·00	20
..	0·01	0·06	0·01	0·01	..	..	..	0·01	0·06	0·48	0·09	8 9	0·45	21
..	..	..	..	..	..	..	..	..	..	0·27	0·11	2 3	0·28	22
..	..	..	..	..	..	..	..	..	..	0·09	0·07	12 13	0·10	23
..	..	..	..	..	..	..	..	..	..	..	..	..	..	24
..	..	..	0·01	0·02	..	..	..	..	..	0·03	0·02	18 19	0·03	25
..	..	..	..	..	..	..	..	..	..	..	..	..	..	26
..	..	..	..	..	..	..	..	..	..	..	..	..	..	27
..	..	..	..	..	..	..	..	..	..	..	..	..	..	28
0·01	0·01	..	..	..	..	..	..	..	..	0·04	0·02	13 14	0·04	29
..	..	..	..	..	..	..	..	..	..	..	..	..	..	30
0·57	0·29	0·77	0·41	0·13	0·12	0·13	0·25	0·28	0·38	9·63	..	..	9·81	Total.

* Adopted as the standard instrument in the Observatory since 1845.

RAINFALL (IN INCHES) 1928.

(Totals for periods of sixty minutes from full hour to full hour of local mean time.)
(FROM PLUVIOGRAPH RECORDS.)

OCTOBER.*

Date.	Hours.													
	0—1	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12	12—13	13—14
2	..	0·02	..	..	..	..	..	..	..	..	..	..	..	..
3	..	..	..	..	..	..	..	0·19	0·01	..	..	..	..	..
4	..	..	..	..	..	..	..	..	..	..	..	..	0·01	..
5	..	..	..	..	..	..	..	..	..	..	..	..	..	..
19	..	..	..	..	..	..	..	..	..	..	..	..	..	..
23	..	..	..	..	..	..	..	..	..	..	..	..	..	..
24	0·01	..	..	..	..	..	..	..	..	..	..	..	..	..
25	..	..	..	..	..	..	..	..	..	..	..	..	..	..
26	..	..	0·01	..	..	..	0·01	0·01	..	..	..	..	..	..
Total	0·01	0·02	0·01	..	..	..	0·01	0·20	0·01	..	..	..	0·01	..

NOVEMBER.*

Date.	Hours.													
	0–1	1–2	2–3	3–4	4–5	5–6	6–7	7–8	8–9	9–10	10–11	11–12	12–13	13–14
14	..	..	..	..	..	..	..	..	..	..	..	..	..	..
30	..	..	..	..	..	0·07	..	..	..	..	..	..	..	..
Total	..	..	..	..	..	0·07	..	..	..	..	..	..	..	..

(Totals for periods of sixty minutes from full hour to full hour of local mean time.)
(FROM PLUVIOGRAPH RECORDS.)

OCTOBER.*

Hours. 14—15	15—16	16—17	17—18	18—19	19—20	20—21	21—22	22—23	23—24	Daily total.	Maximum fall in one hour.	Time of occurrence.	Daily total† by Newman.	Date.
												H. to H.		
..	..	..	..	..	..	..	..	..	..	0·02	0·02	1 2	0·02	2
..	..	..	..	..	..	..	..	..	..	0·20	0·19	7 8	0·20	3
..	..	..	..	..	..	..	..	..	..	0·01	0·01	12 13	0·01	4
..	..	..	..	..	..	..	0·01	..	..	0·01	0·01	21 22	0·01	5
..	..	..	0·10	..	..	..	..	..	..	0·10	0·10	17 18	0·10	19
..	..	..	..	..	..	..	..	..	0·01	0·01	0·01	23 24	0·01	23
..	..	..	..	..	..	..	..	..	..	0·01	0·01	0 1	0·01	24
..	..	..	..	0·04	..	..	..	..	..	0·04	0·04	18 19	0·04	25
..	..	..	..	..	..	..	..	..	..	0·03	0·01	2 3	0·03	26
..	..	..	0·10	0·04	..	..	0·01	..	0·01	0·43	..	..	0·43	

NOVEMBER.*

Hours. 14–15	15–16	16–17	17–18	18–19	19–20	20–21	21–22	22–23	23–24	Daily total.	Maximum fall in one hour.	Time of occurrence.	Daily total† by Newman.	Date.
												H. to H.		
..	..	..	0·02	..	..	..	..	..	..	0·02	0·02	17 18	0·02	14
..	..	..	..	..	..	..	..	..	..	0·07	0·07	5 6	0·07	30
..	..	..	0·02	..	..	..	..	..	..	0·09	..	..	0·09	Total.

* Only those dates on which rainfall occurred have been entered in these tables.

† Adopted as the standard instrument in the Observatory since 1845.

NOTE.—There was a fall of 0·01″ of rain between 6h and 7h, on the 3rd February. The months of January, March to May and December were dry.

Total fall of rain in the year was 34·20″ by Pluviograph and 35·73″ by Newman; the difference is due to the difference in heights of the receiving funnels of the two instruments.

Total number of rainy days in the year was 70 according to Pluviograph and 74 according to Newman, assuming a 'rainy day' to be one on which a tenth of an inch of rain or upwards has fallen.

The greatest fall of rain during a day in the year, that of the 12th June, was 3·83″ by Pluviograph and 3·96″ by Newman.

JANUARY. (Averages for periods of sixty minutes from full hour to full hour of local mean time.) (IN MILES PER HOUR.)

Date.	Hours.															
	0—1	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12	12—13	13—14	14—15	15—16
1	9	11	11	12	13	10	9	7	8	9	10	8	12	13	16	16
2	8	7	8	11	11	11	10	9	11	11	9	7	10	12	13	13
3	8	7	9	9	12	12	13	12	12	13	11	8	9	8	7	8
4	8	7	6	6	7	8	9	10	11	10	8	6	6	8	7	8
5	8	6	6	6	7	8	8	9	9	9	9	8	8	7	8	11
6	9	8	8	8	8	9	10	13	11	9	10	8	8	6	7	7
7	4	8	7	9	9	10	11	12	11	9	8	8	5	8	8	9
8	5	7	8	10	10	9	8	7	7	7	4	9	8	7	9	9
9	8	7	6	6	9	11	9	10	11	9	3	4	7	14	14	14
10	8	8	8	6	9	10	12	12	8	7	4	5	5	10	11	11
11	8	8	9	9	9	9	9	5	7	7	5	6	6	10	11	12
12	6	6	6	6	8	8	9	6	6	7	5	5	6	11	13	13
13	6	8	10	7	7	6	6	5	3	4	6	5	5	4	8	9
14	8	9	9	7	7	7	8	7	5	4	4	2	1	5	7	8
15	7	7	7	6	4	4	4	4	5	5	5	6	6	4	8	8
16	8	8	8	8	8	7	6	6	6	6	2	2	6	8	8	10
17	8	7	7	8	7	7	7	6	6	6	6	5	7	7	9	10
18	8	8	8	8	8	8	5	5	5	8	6	2	3	13	12	12
19	8	8	8	8	8	7	6	6	5	5	5	12	14	16	15	15
20	7	8	8	8	9	10	8	10	7	5	5	7	14	17	20	16
21	7	9	8	8	8	8	8	10	7	5	6	3	2	9	13	14
22	6	6	6	5	5	8	9	10	7	5	4	7	10	9	9	11
23	7	7	8	6	6	7	8	7	5	5	5	5	8	11	13	13
24	7	8	7	8	7	8	9	7	5	5	6	8	9	11	16	16
25	5	5	7	6	8	9	8	8	9	9	9	8	12	12	12	15
26	6	6	6	5	6	6	6	6	7	6	10	13	15	12	12	11
27	5	4	4	4	4	6	6	5	7	8	7	10	12	10	8	8
28	8	9	13	14	13	12	12	9	10	10	14	15	17	19	21	22
29	9	11	10	8	8	8	8	9	9	10	14	17	20	17	20	22
30	13	14	13	13	10	11	11	8	9	10	17	15	25	16	16	16
31	13	9	8	10	9	9	9	7	6	8	10	13	14	19	20	20
Mean ..	7·5	7·7	8·0	8·0	8·3	8·5	8·5	7·5	7·5	7·5	7·3	8·4	10·1	11·5	12·3	12·8

FEBRUARY.

1	7	9	9	10	8	9	7	9	10	10	16	21	21	24	24	24
2	8	7	8	7	6	7	8	11	10	6	13	20	21	24	22	22
3	5	7	9	11	14	16	16	10	7	8	13	8	8	11	14	14
4	9	9	9	9	9	8	7	7	7	10	9	12	14	15	15	15
5	7	7	8	8	8	9	7	7	8	7	6	7	5	7	8	11
6	4	6	7	7	6	7	7	7	7	5	3	5	8	10	10	11
7	4	4	4	6	7	9	7	7	6	7	7	9	11	10	10	11
8	4	4	4	4	5	6	6	9	4	5	2	6	7	10	11	11
9	4	4	4	4	7	7	5	5	7	6	5	6	6	9	10	9
10	6	7	6	7	9	7	6	6	5	5	5	5	9	11	13	14
11	5	5	5	7	7	7	6	6	5	4	2	3	7	8	12	12
12	6	6	6	6	6	6	7	7	8	7	12	16	17	16	16	16
13	10	10	11	12	11	10	7	7	7	8	8	11	16	16	17	16
14	13	13	12	12	9	13	11	8	10	12	9	13	17	18	18	17
15	10	9	12	15	11	14	12	11	7	10	7	8	9	13	15	16
16	8	7	5	6	5	7	7	7	7	7	4	2	6	9	8	8
17	8	8	8	8	5	5	5	5	5	5	3	4	7	10	10	10
18	4	4	4	4	5	5	5	5	3	4	7	10	10	9	10	10
19	4	4	9	9	8	7	6	6	3	6	6	11	11	13	13	13
20	11	13	11	11	10	8	9	6	5	5	4	8	10	12	15	12
21	12	10	11	11	10	8	8	7	8	8	9	9	10	12	12	12
22	8	9	8	7	6	6	6	6	6	6	5	7	10	12	12	12
23	4	5	4	8	9	9	6	7	6	5	4	5	7	10	12	10
24	5	3	7	4	6	6	7	6	5	5	5	4	4	8	8	8
25	7	7	9	10	11	8	8	7	5	5	6	4	6	8	10	8
26	12	12	9	8	9	8	8	8	7	6	6	2	3	8	9	11
27	10	10	8	5	3	4	4	5	7	6	6	3	3	4	5	7
28	0	1	1	2	1	3	4	4	5	6	6	3	3	11	14	13
29	0	0	0	1	2	2	3	7	11	8	7	7	10	13	13	14
Mean ..	6·8	6·9	7·3	7·6	7·3	7·5	7·0	6·9	6·6	6·4	6·5	8·5	10·7	12·2	12·9	12·8

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

JANUARY. (IN MILES PER HOUR).

Hours.									Mean.	Mean by R. Beckley's Anemograph.	Maximum.			Minimum.			Date.
15—16	16—17	17—18	18—19	19—20	20—21	21—22	22—23	23—24			Time.		Mag.	Time.		Mag.	
											H.	M.		H.	M.		
16	18	18	15	16	14	11	10	10	11·9	8·3	16	42	24	7	55	5	1
14	15	14	14	11	10	7	6	6	10·2	7·1	16	50	20	11	24	3	2
9	10	9	9	9	11	10	8	8	9·7	6·4	7	22	16	14	15	5	3
10	12	10	11	11	9	9	8	8	8·6	5·5	16	15	16	12	59	4	4
8	10	11	10	10	10	9	7	8	8·3	5·1	16	59	15	12	37	4	5
11	11	15	15	13	11	8	7	5	9·4	6·3	17	45	20	13	26	4	6
12	15	14	15	12	11	8	6	6	9·5	5·9	18	20	19	1	0	3	7
9	13	11	10	10	9	9	7	7	8·3	5·0	16	45	17	10	25	3	8
15	15	13	13	12	9	9	8	7	9·6	6·2	15	2	20	10	20	2	9
12	15	17	18	17	16	10	9	8	10·3	7·0	18	3	24	10	20	2	10
13	12	11	10	10	9	6	6	6	8·6	5·1	16	16	16	10	58	2	11
17	18	10	18	13	8	6	5	5	9·3	6·7	16	45	26	11	36	1	12
9	10	11	12	7	5	5	7	7	7·1	5·2	19	43	17	1	45	2	13
10	11	10	10	11	10	7	7	7	7·3	5·3	16	46	16	11	30	1	14
8	9	10	11	9	7	7	8	8	6·7	4·2	17	16	13	12	51	3	15
9	9	8	11	9	8	8	8	8	7·6	4·4	14	29	13	10	25	2	16
14	14	15	14	14	10	9	10	9	9·6	6·6	15	33	20	10	38	3	17
12	13	13	16	16	14	10	8	8	9·3	6·0	19	13	21	10	45	1	18
12	12	11	13	13	11	12	11	10	10·3	6·9	13	7	21	8	25	5	19
16	17	17	17	14	12	12	11	9	11·3	8·0	13	45	26	8	55	5	20
14	16	16	16	13	12	10	10	9	9·7	6·6	17	7	23	10	40	1	21
13	16	13	12	12	8	5	5	7	8·3	5·3	16	30	20	10	28	1	22
13	14	14	12	11	11	10	8	8	9·0	6·1	17	22	19	10	16	3	23
18	16	16	14	13	10	6	6	5	9·7	6·5	16	6	23	10	15	3	24
15	14	14	15	14	15	13	8	6	10·4	7·9	17	3	21	0	0	5	25
12	13	13	13	12	11	9	8	6	9·3	6·8	12	32	21	7	50	5	26
9	10	10	13	12	9	7	7	7	7·6	5·2	19	5	18	3	0	4	27
26	24	22	21	18	16	13	11	9	14·8	11·0	15	41	34	9	50	6	28
23	22	22	22	22	20	16	13	12	14·3	10·5	16	41	31	4	10	7	29
16	13	17	14	15	18	20	18	16	14·3	10·7	20	55	25	11	43	7	30
23	20	18	17	16	12	9	12	12	12·6	9·4	15	32	33	8	15	5	31
13·4	14·2	13·9	13·9	12·9	11·3	9·3	8·4	8·0	9·7	6·6							Mean.

FEBRUARY.

24	23	19	17	16	13	11	9	9	14·0	10·5	15	12	35	6	10	5	1
20	18	18	20	15	8	7	6	5	12·3	8·8	14	9	32	9	50	3	2
17	16	17	15	14	11	7	6	7	11·1	7·9	15	33	23	8	25	3	3
19	19	18	19	20	16	14	10	8	12·2	8·7	16	5	27	10	45	3	4
11	11	10	12	12	11	10	7	7	8·5	6·7	14	45	15	9	50	4	5
12	11	10	11	10	9	6	4	4	7·6	4·8	15	29	15	10	30	3	6
13	15	13	13	10	9	6	4	4	8·3	5·5	16	23	19	1	7	3	7
10	12	14	12	10	9	7	5	5	7·0	4·3	17	16	17	10	45	1	8
10	10	7	5	4	4	6	6	6	6·1	3·7	15	9	14	1	4	4	9
12	12	10	7	6	6	6	5	5	7·7	4·8	13	47	19	10	55	1	10
14	13	10	7	6	6	6	6	6	6·8	3·9	15	5	19	10	56	0	11
17	16	16	14	13	12	11	11	11	10·8	7·2	15	15	26	8	55	3	12
18	16	18	20	17	14	6	8	9	12·2	8·4	18	30	28	21	56	6	13
17	17	20	21	20	16	10	9	8	13·5	9·2	18	10	27	7	55	6	14
18	18	20	18	16	15	12	8	8	12·7	8·8	16	32	27	9	17	5	15
10	12	14	14	12	9	8	8	8	7·9	5·2	17	33	18	11	10	1	16
11	10	10	11	10	7	7	7	5	7·3	4·6	15	28	13	11	13	1	17
11	11	12	11	10	6	5	4	4	6·8	5·1	17	55	16	8	19	3	18
13	14	14	14	12	7	6	6	5	8·6	5·8	16	24	19	8	17	2	19
16	16	14	13	6	6	8	11	12	9·9	6·8	15	3	22	8	55	5	20
12	12	11	8	6	6	6	8	9	9·1	6·1	16	30	16	7	0	5	21
13	15	16	16	14	10	6	5	4	8·9	6·2	17	22	22	0	4	4	22
10	11	12	9	5	5	1	2	3	6·6	4·4	16	54	16	22	6	1	23
12	13	15	12	13	7	7	7	7	8·4	5·7	17	16	21	10	25	1	24
11	11	11	11	11	7	5	7	11	8·1	5·7	17	5	16	11	0	1	25
11	12	14	12	10	5	1	4	6	8·3	5·8	17	15	18	10	40	0	26
10	10	9	8	4	3	3	3	3	5·8	3·8	16	56	13	23	57	0	27
12	11	11	10	7	5	5	1	0	5·5	4·3	13	8	18	0	0	0	28
14	15	13	12	13	9	9	9	7	8·2	6·4	16	28	21	0	0	0	29
13·8	13·8	13·7	12·8	11·1	8·9	6·9	6·3	6·4	9·0	6·2							Mean.

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

MARCH. (IN MILES PER HOUR.)

Date.	Hours.															
	0—1	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12	12—13	13—14	14—15	
1	6	5	5	5	7	7	6	4	2	6	3	7	9	13	13	
2	5	4	4	4	8	7	6	5	3	4	2	8	10	11	14	
3	6	4	5	6	7	6	6	4	3	5	7	10	12	13	13	
4	8	8	7	6	6	6	5	5	4	4	5	6	9	10	11	
5	6	7	6	7	7	5	6	7	7	10	14	14	16	17	17	
6	7	8	10	9	8	7	8	7	6	3	3	3	9	10	12	
7	4	7	7	8	8	8	7	6	3	2	3	7	11	10	11	
8	12	13	11	7	6	6	6	6	5	3	5	7	8	9	11	
9	5	6	11	10	12	14	11	4	2	2	12	15	16	16	19	
10	11	13	14	14	12	8	7	6	6	6	8	9	14	16	16	
11	14	9	8	8	11	10	11	13	13	11	10	16	16	18	18	
12	17	14	17	16	11	7	6	4	9	7	8	9	10	12	13	
13	9	11	9	3	5	2	3	3	2	2	5	7	9	10	10	
14	4	4	3	3	3	3	2	9	11	5	4	5	7	10	12	
15	1	1	2	4	7	8	5	4	4	4	4	6	9	11	14	
16	5	9	8	7	6	5	1	2	6	6	5	7	9	11	11	
17	3	3	3	3	2	2	2	2	2	5	6	7	7	11	12	
18	2	2	3	4	2	5	10	5	11	6	6	4	7	13	15	
19	6	6	6	6	6	6	5	3	6	2	2	6	7	10	11	
20	2	2	3	4	3	7	10	9	6	3	7	9	11	13	13	
21	9	6	3	6	7	6	4	3	4	4	6	8	13	14	14	
22	2	2	2	2	2	2	2	2	4	3	3	6	8	11	11	
23	5	4	4	5	5	6	6	6	6	5	4	6	8	7	7	
24	3	3	4	4	5	5	5	6	7	9	11	12	12	12	14	
25	14	10	9	8	8	8	7	6	6	5	8	11	14	16	16	
26	14	13	9	8	8	8	7	10	9	6	8	12	11	15	15	
27	4	5	5	5	5	3	3	3	13	14	8	8	12	13	10	
28	4	4	5	7	8	8	7	8	8	8	8	9	11	11	11	
29	3	3	3	3	3	4	8	7	8	1	6	9	12	15	15	
30	12	7	6	5	5	4	8	4	1	4	7	10	12	14	15	
31	5	5	5	8	8	6	4	3	1	4	6	9	11	12	13	
Mean ..	6·7	6·4	6·5	6·5	6·4	6·0	5·9	5·2	5·1	5·6	6·8	8·9	11·1	12·5	13·2	

APRIL.

1	6	5	5	6	6	6	5	5	3	2	7	9	11	12	12	
2	10	7	6	5	4	7	13	9	7	8	7	7	7	9	9	
3	4	6	10	11	11	10	10	12	11	13	17	17	16	14	13	
4	4	9	7	9	9	9	3	0	5	6	6	4	5	7	9	11
5	10	9	8	5	12	9	3	5	7	8	6	10	16	15	16	
6	5	5	3	1	6	3	2	1	1	1	2	10	16	19	17	
7	11	11	9	8	7	6	5	6	8	7	7	8	10	11	12	
8	12	12	13	12	9	7	6	6	8	11	12	11	9	9	9	
9	3	3	3	2	2	3	3	4	2	2	2	5	10	11	12	
10	1	1	2	5	5	5	3	4	4	2	7	9	11	13	15	
11	1	1	1	1	2	3	4	4	5	5	2	7	10	12	13	
12	8	9	6	1	1	2	7	0	7	5	6	8	9	10	12	
13	2	1	1	1	1	0	5	4	6	2	6	7	11	15	15	
14	4	6	6	6	4	4	4	4	4	7	8	11	14	17	15	
15	10	9	7	5	5	5	2	3	4	4	7	9	11	11	12	
16	6	5	6	4	2	2	4	2	4	3	6	7	8	11	14	
17	7	7	5	6	5	4	5	4	4	7	8	9	10	10	11	12
18	3	6	5	4	5	4	5	1	0	1	5	9	11	11	12	
19	4	5	5	5	4	5	2	1	1	6	8	10	11	12	13	
20	9	7	7	9	8	6	3	5	3	4	5	7	11	14	14	16
21	10	7	8	8	8	5	5	3	2	6	7	9	7	10	12	15
22	7	8	7	8	8	4	4	3	2	4	4	3	4	7	12	12
23	6	7	7	8	4	4	3	3	2	4	3	11	12	13	15	17
24	7	7	7	8	6	3	2	2	0	5	8	7	11	14	15	17
25	5	3	3	2	3	2	2	1	0	0	6	4	7	8	12	14
26	8	7	6	5	5	3	3	2	2	2	4	10	13	16	18	19
27	6	6	5	5	4	3	3	2	5	7	10	11	13	15	18	18
28	12	7	6	6	5	5	4	3	3	2	3	7	10	12	13	15
29	8	10	14	12	7	5	5	3	3	5	9	11	11	15	16	
30	6	5	4	1	1	0	0	2	6	10	9	12	12	15	14	
Mean ..	6·5	6·2	6·0	5·3	4·7	4·2	3·6	3·7	4·8	5·9	7·8	10·1	11·9	13·3	13·9	

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

MARCH. (IN MILES PER HOUR.)

Hours.										Mean.	Mean by R. J. Beckley's Anemograph.	Maximum.			Minimum.			Date.
15—16	16—17	17—18	18—19	19—20	20—21	21—22	22—23	23—24				Time.		Mag.	Time.		Mag.	
												H.	M.		H.	M.		
13	12	13	11	11	11	8	6	4		7·8	5·6	15	26	20	10	30	0	1
14	14	11	8	9	12	14	12	8		8·3	6·3	15	46	21	10	15	0	2
12	14	12	10	7	6	5	5	7		7·7	5·9	14	26	18	1	54	2	3
12	10	10	9	6	7	7	6	7		7·1	5·0	15	22	16	11	17	2	4
16	17	18	17	17	14	12	10	8		11·4	8·5	16	16	24	4	54	5	5
13	14	17	16	13	12	11	8	8		9·4	6·7	17	35	21	10	57	0	6
18	12	12	13	11	10	6	5	7		8·3	6·2	16	7	17	0	16	1	7
12	11	10	11	11	9	6	5	5		7·7	6·3	0	51	17	21	25	1	8
17	17	17	19	17	14	10	9	11		11·9	9·1	14	16	25	9	13	0	9
17	18	19	17	15	11	9	11	13		12·1	8·5	17	12	26	10	53	5	10
17	17	13	13	11	9	9	10	14		12·5	9·3	14	10	25	1	27	6	11
14	13	13	12	9	7	9	8	7		10·5	8·0	2	55	22	7	25	2	12
12	13	7	3	5	6	4	4	4		6·4	4·2	15	55	16	6	56	0	13
13	12	11	8	5	4	3	2	1		6·0	4·3	8	13	16	10	49	0	14
12	10	9	6	6	6	6	7	5		6·3	4·7	14	52	18	0	0	1	15
12	13	9	7	5	4	3	3	3		6·6	4·8	13	55	16	4	34	0	16
13	13	12	9	6	5	3	2	2		6·7	4·2	15	12	17	22	22	2	17
14	14	11	12	12	11	8	6	6		8·1	6·0	14	39	19	10	53	1	18
13	14	13	8	6	4	3	2	2		6·5	6·0	15	4	20	8	11	2	19
14	15	17	16	14	12	6	7	8		8·9	7·5	17	59	23	9	52	2	20
13	12	13	9	7	5	4	2	2		7·4	6·0	13	16	17	22	10	2	21
11	11	10	9	7	6	6	6	5		7·5	4·6	17	6	15	10	0	1	22
8	8	8	6	6	4	4	4	3		5·4	3·7	15	35	10	10	45	2	23
16	18	18	18	18	12	10	6	10		9·8	7·5	16	21	22	0	57	3	24
19	19	19	18	18	16	11	10	12		12·3	9·6	16	50	26	8	9	4	25
16	16	15	15	14	15	12	11	5		11·6	8·8	15	54	23	23	24	4	26
10	9	9	8	8	7	4	5	5		7·5	6·2	9	5	18	7	25	1	27
12	12	10	8	8	7	6	5	6		7·9	6·0	12	40	18	0	49	4	28
15	15	19	13	15	11	13	10	11		8·7	7·2	18	5	26	7	50	0	29
14	15	18	15	12	10	8	6	5		8·9	6·8	17	31	23	8	9	0	30
15	16	16	15	15	10	6	5	6		8·4	6·3	17	37	22	8	7	1	31
13·5	13·7	13·0	11·7	10·4	9·0	7·4	6·4	6·4		8·5	6·4							Mean.

APRIL.

12	11	12	8	6	3	2	1	0		6·7	5·0	13	15	16	22	9	0	1
13	10	7	4	2	4	2	2	1		7·4	5·4	16	10	15	5	26	0	2
11	11	8	4	3	1	4	5	4		9·4	6·8	11	45	22	0	44	0	3
12	11	10	8	6	4	4	5	4		8·6	4·6	16	25	16	6	46	0	4
17	15	12	7	6	4	4	5	7		9·1	7·2	12	47	21	20	7	3	5
19	19	21	17	15	8	3	5	5		8·4	6·7	16	38	28	10	44	0	6
12	11	9	8	8	9	11	12	9		9·8	5·8	14	21	18	9	28	1	7
9	9	7	6	8	6	5	5	3		8·5	5·7	3	17	17	6	56	0	8
13	14	16	14	12	9	9	9	6		7·3	5·7	17	37	23	9	26	0	9
14	14	11	10	7	5	3	1	1		6·4	4·9	14	45	20	9	20	1	10
15	15	15	11	8	4	2	2	3		6·9	5·2	16	45	21	10	31	0	11
11	11	10	8	4	2	4	3	3		6·8	6·6	15	7	16	9	18	0	12
16	19	17	15	14	14	13	10	9		8·0	6·5	16	57	27	5	20	0	13
17	18	16	13	10	7	8	11	14		9·0	8·0	23	30	23	7	21	0	14
17	15	13	12	9	9	8	8	7		9·0	7·2	15	13	20	7	0	3	15
14	14	12	11	9	8	7	5	5		7·0	5·6	14	51	19	7	37	0	16
13	13	11	9	9	8	8	5	4		7·8	5·8	15	17	19	7	10	2	17
12	12	11	11	10	11	9	8	5		7·2	5·7	16	18	19	6	24	0	18
12	12	11	10	8	9	8	9	7		7·8	5·9	13	9	19	8	4	0	19
16	16	16	12	10	11	12	12	13		10·5	7·9	16	16	25	8	9	2	20
15	15	12	11	7	10	10	8	9		9·5	7·4	15	59	23	6	24	1	21
14	14	13	11	8	6	6	8	8		7·7	6·5	15	44	20	9	40	0	22
16	16	13	11	6	2	1	0	5		7·4	6·3	16	26	22	22	0	0	23
16	18	17	13	10	7	6	5	5		8·7	6·9	16	19	25	6	13	0	24
19	16	17	14	14	12	10	8	9		8·7	6·0	15	28	25	7	4	0	25
20	20	20	18	16	14	14	13	11		10·8	7·2	16	50	29	6	31	0	26
19	18	16	18	15	13	11	11	11		10·7	6·9	16	37	28	6	7	2	27
15	16	14	8	8	9	9	10	9		9·2	6·5	16	31	22	6	59	2	28
16	17	12	12	8	7	8	10	7		9·5	6·9	16	18	23	6	46	0	29
15	17	16	12	8	10	10	9	9		8·5	5·3	17	16	21	6	35	0	30
14·7	14·6	13·6	11·2	9·3	7·3	7·0	7·1	7·1		8·3	6·1							Mean.

MAY.

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)
(IN MILES PER HOUR.)

Date.	Hours.															
	0—1	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12	12—13	13—14	14—15
1	8	7	4	2	1	2	6	9	11	10	10	11	11	12	13
2	7	7	6	6	4	2	2	7	7	7	8	8	11	12	13
3	7	9	7	7	8	7	6	6	7	6	7	9	13	14	16
4	15	11	7	8	8	7	4	1	4	6	10	13	15	16	14
5	7	6	8	11	11	13	12	11	12	10	10	11	12	13	14
6	6	6	5	4	10	16	15	13	13	10	9	8	10	11	12
7	7	7	7	6	6	5	3	2	8	9	10	9	11	12	10
8	7	6	6	6	7	5	4	3	5	6	9	10	11	13	16
9	9	7	6	6	5	5	4	5	6	7	9	9	10	11	11
10	7	6	6	6	6	6	4	4	4	5	8	10	12	13	16
11	7	6	6	6	6	5	5	5	6	8	11	12	12	12	12
12	9	9	9	10	10	9	7	7	7	8	7	9	10	11	12
13	9	9	8	9	9	13	14	12	11	13	12	12	12	12	12
14	12	11	13	12	10	9	9	8	9	9	8	11	12	12	13
15	8	9	9	8	9	9	8	9	7	8	8	9	9	9	10
16	7	9	9	10	8	8	8	7	6	6	7	7	9	11	11
17	7	10	9	8	7	7	4	4	8	9	8	10	10	12	12
18	7	7	6	6	6	5	4	4	4	7	7	10	12	13	14
	7	7	6	7	5	7	3	5	6	9	12	15	15	15	17
	12	11	9	4	4	6	6	6	5	8	11	12	16	17	17
2	16	14	13	12	8	1	1	1	1	6	10	14	15	17	18
	11	14	12	12	11	7	5	5	7	9	12	13	16	16	16
	4	7	8	7	4	3	2	2	3	6	7	10	11	12	11
24	7	8	7	6	6	7	5	6	7	8	9	10	11	11	11
25	7	7	7	7	6	7	6	6	7	8	9	10	11	12	12
26	10	10	11	11	13	9	11	11	10	9	9	11	11	10	10
27	10	10	9	11	10	9	8	6	10	9	10	11	12	11	14
28	8	7	8	12	12	11	10	8	7	8	7	9	11	13	12
29	11	8	8	8	7	7	4	5	8	3	6	8	8	11	13
30	10	10	9	10	10	8	6	6	6	6	11	11	10	13	14
31	8	7	6	7	7	8	9	6	7	8	10	10	11	12	14
Mean ..	8·6	8·4	7·9	7·9	7·4	7·2	6·3	6·2	6·8	7·8	9·1	10·4	11·6	12·5	13·2

JUNE.

1	9	9	9	9	7	6	5	6	5	7	9	10	12	13	14
2	10	8	6	8	7	6	3	5	6	8	10	14	14	15	15
3	7	6	9	7	8	6	3	6	7	8	9	8	10	10	10
4	9	8	8	7	8	6	4	4	5	5	6	6	8	10	10
5	8	7	6	7	10	8	4	8	9	12	9	9	10	11	11
6	7	6	6	6	4	4	6	12	14	8	11	9	9	10	11
7	8	7	7	8	4	4	4	4	6	8	8	9	11	12	13
8	13	15	13	13	15	13	11	10	9	9	10	11	12	12	14
9	14	15	15	15	14	10	10	10	9	9	12	12	12	14	15
10	12	13	13	14	9	19	14	15	12	7	7	7	12	12	8
11	14	10	9	11	10	8	1	1	5	10	9	8	7	7	10
12	14	14	13	13	14	9	9	6	14	12	17	17	16	16	16
13	16	18	16	16	7	9	7	7	4	14	24	20	20	19	17
14	14	12	18	22	22	23	23	22	22	19	18	20	21	21	20
15	24	23	22	23	22	21	20	18	21	22	23	22	22	22	23
16	24	24	24	24	22	22	24	22	21	16	20	21	21	21	24
17	24	23	23	23	23	23	22	21	20	20	22	20	22	22	21
18	16	17	18	18	18	18	17	19	19	19	19	18	19	20	18
19	17	17	16	16	16	16	13	13	12	12	14	15	17	16	16
20	16	16	18	20	20	17	17	13	12	10	13	9	11	19	24
21	17	18	16	16	17	15	14	16	17	21	23	24	15	12	17
22	19	19	18	17	16	18	7	10	15	14	24	23	23	20	21
23	16	16	13	10	12	16	11	8	8	11	14	16	16	16	16
24	12	13	13	15	11	13	13	13	13	15	16	13	12	19	12
25	14	13	14	13	10	17	14	12	12	11	14	9	8	16	10
26	11	16	16	11	12	13	11	13	13	12	12	9	15	16	17
27	9	12	12	12	12	14	13	12	12	11	11	11	11	15	14
28	11	12	11	12	14	16	13	7	6	12	13	13	11	14	16
29	11	12	13	13	16	13	8	15	12	11	14	11	14	13	17
30	10	11	12	9	7	9	10	8	7	11	6	10	12	12	10
Mean ..	13·5	13·6	13·6	13·3	12·8	13·1	11·1	11·1	11·5	12·1	13·8	13·4	14·1	15·1	15·3

MAY.

(Averages for periods of sixty minutes from full hour to full hour of local mean time). (IN MILES PER HOUR.)

Hours.									Mean.	Mean by R. Beckley's anemograph	Maximum.		Minimum.		Date.
15—16	16—17	17—18	18—19	19—20	20—21	21—22	22—23	23—24			Time.	Mag.	Time.	Mag.	
											H. M.		H. M.		
13	12	12	11	11	10	10	9	8	8·9	5·0	15 14	18	4 9	1	1
12	12	11	10	9	8	7	7	8	8·0	4·3	13 28	19	5 31	0	2
17	17	16	13	16	16	16	17	18	11·4	7·6	15 58	24	9 50	4	3
15	16	16	15	10	10	13	9	6	10·3	7·0	13 9	22	6 41	0	4
13	13	10	9	9	8	7	7	7	10·1	6·3	14 51	18	1 19	3	5
12	12	12	12	9	8	9	8	10	10·0	5·8	5 35	19	2 55	3	6
10	10	10	11	11	10	10	9	8	8·4	5·1	8 51	18	6 41	0	7
14	13	13	13	13	11	9	9	8	9·1	5·2	14 14	21	6 52	0	8
10	10	11	9	11	8	8	7	7	8·0	4·4	17 17	14	10 40	3	9
14	13	11	11	11	10	9	8	8	8·6	4·7	14 21	20	7 59	2	10
13	13	12	12	12	12	11	10	9	9·4	4·8	16 46	20	13 19	4	11
13	13	10	9	9	9	9	9	9	9·3	5·3	14 51	17	10 40	3	12
12	11	12	11	10	9	10	11	12	11·0	5·6	6 23	19	19 14	4	13
13	12	12	10	9	9	9	8	9	10·3	5·3	12 5	21	10 47	4	14
11	10	9	8	8	8	8	6	8	8·6	4·7	15 21	17	22 21	2	15
11	11	11	9	9	7	7	8	7	8·5	5·4	14 27	16	0 6	2	16
13	12	11	11	10	9	7	7	7	8·8	5·3	16 50	17	6 52	0	17
14	14	13	11	10	7	5	5	7	8·4	6·1	16 43	20	6 45	0	18
17	17	17	16	14	14	14	13	12	11·3	8·0	16 3	25	6 25	0	19
20	19	19	20	20	20	18	20	16	13·6	8·9	19 54	29	9 17	2	20
17	19	19	21	17	15	10	10	11	11·7	8·7	18 24	24	5 6	1	21
14	14	13	12	10	8	7	5	3	10·5	7·0	13 14	22	23 2	3	22
10	12	11	10	9	8	9	10	8	7·6	3·3	16 55	18	9 35	1	23
12	11	12	11	11	10	8	7	7	8·7	4·8	17 23	20	9 32	1	24
12	12	11	10	10	10	9	10	10	9·0	4·2	12 40	18	8 9	1	25
11	11	10	10	10	11	11	12	10	10·4	6·4	22 29	17	22 25	4	26
13	12	13	13	10	10	10	9	8	10·3	6·7	14 42	16	7 10	0	27
12	12	12	10	8	9	8	11	10	9·8	7·2	17 39	17	10 17	5	28
13	11	11	9	9	7	7	10	10	8·1	5·3	15 28	17	6 43	0	29
16	13	13	11	10	10	8	9	9	9·9	6·0	14 46	20	2 31	4	30
14	15	14	12	11	9	9	10	9	9·7	7·3	16 11	20	7 25	5	31
13·2	13·0	12·5	11·6	10·8	10·0	9·5	9·4	9·0	9·6	5·9					Mean

JUNE.

16	17	15	12	11	9	10	11	11	10·1	7·4	16 17	22	5 49	3	1
15	14	13	12	13	10	9	8	6	9·3	6·1	14 24	20	6 4	0	2
10	10	10	9	8	6	9	8	8	8·2	4·9	14 54	16	9 46	1	3
12	12	11	12	11	11	10	10	8	8·3	4·8	16 16	16	11 31	0	4
12	11	10	7	7	7	7	7	7	8·5	5·5	16 19	16	23 24	5	5
11	11	11	9	7	7	7	7	8	8·4	4·6	8 55	17	9 29	1	6
14	13	12	12	11	13	12	13	13	12·3	6·5	20 24	29	7 9	0	7
14	15	14	13	13	12	13	13	13	12·5	9·6	22 38	26	22 52	6	8
15	14	15	12	12	12	13	11	10	12·5	8·6	16 2	21	10 35	6	9
9	11	10	9	8	7	8	9	14	10·8	6·6	5 50	29	6 45	0	10
13	13	15	16	15	15	12	13	13	12·1	6·7	4 55	21	8 38	0	11
13	14	13	11	10	8	7	8	11	12·2	6·8	0 54	28	2 0	0	12
16	7	3	6	14	12	12	11	12	12·5	5·6	9 50	36	5 44	3	13
22	22	24	24	26	25	24	25	24	21·4	11·5	17 35	40	1 15	9	14
23	23	23	23	23	22	22	24	23	22·8	9·5	22 31	34	7 35	10	15
19	23	22	22	22	22	21	22	24	22·0	9·5	14 40	40	9 24	5	16
22	22	22	21	21	21	22	18	16	21·4	10·3	0 27	31	7 15	12	17
18	17	16	16	18	18	18	19	20	18·1	8·3	20 15	32	18 21	11	18
14	12	13	15	17	16	18	20	19	15·3	7·0	12 14	27	8 19	8	19
21	20	16	15	12	12	15	13	17	15·6	7·9	10 6	34	9 32	4	20
18	15	14	14	13	15	15	16	18	16·5	9·6	11 41	31	13 45	6	21
24	16	12	12	14	15	16	14	13	16·6	10·1	10 47	30	7 4	3	22
16	18	21	17	15	14	10	12	12	13·9	5·9	17 13	30	8 59	3	23
18	11	10	11	10	10	12	13	11	12·7	5·5	15 42	35	16 36	5	24
18	16	15	15	16	16	18	17	14	13·8	6·3	5 39	33	1 17	6	25
14	14	15	14	13	12	11	9	9	12·8	6·5	2 7	24	3 46	4	26
15	15	14	16	10	9	10	10	10	11·9	6·9	17 5	18	9 6	7	27
13	10	8	7	7	7	7	7	9	10·6	5·5	5 52	21	8 10	1	28
17	14	12	8	7	7	9	6	8	11·7	6·8	4 16	31	11 3	5	29
11	8	6	6	6	8	10	14	16	9·5	5·5	13 3	24	10 35	0	30
15·8	14·6	13·8	13·0	13·0	12·7	12·9	13·0	13·2	13·3	7·1					Mean

JULY. (Averages for periods of sixty minutes from full hour to full hour of local mean time.) (IN MILES PER HOUR.)

Date.	Hours.															
	0—1	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12	12—13	13—14	14—15	
1	16	16	15	14	13	15	16	17	18	18	19	20	19	17	18	
2	16	19	20	19	19	20	24	20	22	14	23	24	18	16	14	
3	10	8	12	11	12	13	13	13	25	16	17	14	14	12	10	
4	12	11	16	17	16	10	14	18	23	26	20	19	21	21	18	
5	20	18	16	15	17	18	21	23	24	24	25	24	22	24	21	
6	16	17	18	18	18	18	18	17	17	17	16	15	15	15	16	
7	13	13	14	13	12	12	10	9	10	10	9	9	7	9	11	
8	12	12	10	11	10	8	10	9	9	9	10	12	13	13	13	
9	13	13	13	14	13	12	12	12	12	13	13	14	12	12	12	
10	9	11	13	17	12	11	14	11	12	8	9	9	11	11	12	
11	10	9	15	16	16	13	13	17	16	14	10	11	18	14	21	
12	11	11	11	8	11	13	9	13	8	13	13	10	10	11	13	
13	14	14	14	16	16	14	14	14	13	16	18	18	19	18	17	
14	18	19	18	18	19	20	18	18	18	18	19	19	20	19	19	
15	17	17	16	16	18	17	18	16	17	18	18	19	17	17	17	
16	15	14	14	15	14	18	18	18	18	18	18	19	18	18	20	
17	15	16	16	16	16	15	15	16	16	16	17	18	18	14	16	
18	19	16	20	21	17	14	19	21	22	20	16	15	21	20	16	
19	18	18	20	23	23	16	18	15	14	20	20	23	21	17	19	
20	25	23	28	26	28	23	23	27	27	27	28	28	26	27	28	
21	26	28	26	28	26	28	27	27	24	26	26	26	26	24	22	
22	23	24	25	25	23	22	20	21	20	23	20	21	21	20	21	
23	20	21	21	20	24	21	20	20	20	20	16	19	20	20	20	
24	20	20	20	21	26	24	21	24	23	22	20	22	22	21	21	
25	19	22	22	19	20	20	20	20	21	21	21	23	20	20	22	
26	19	18	17	20	22	18	18	20	21	23	23	21	22	24	26	
27	21	20	22	19	24	18	22	22	21	26	23	19	25	21	22	
28	26	23	24	24	26	24	22	23	21	24	23	23	24	21	20	
29	21	19	22	20	18	18	18	18	18	18	19	17	18	16	18	
30	19	15	18	17	18	18	18	18	18	18	18	18	19	19	17	
31	21	21	20	20	20	21	20	20	20	20	21	19	20	20	20	
Mean . .	17·3	16·9	17·9	17·8	18·2	17·2	17·5	18·0	18·2	18·7	18·5	18·2	18·4	17·9	18·0	

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1	21	22	22	24	24	24	22	24	25	22	21	21	23	21	21	
2	20	22	24	22	21	22	20	25	22	22	21	21	20	19	20	
3	20	18	20	20	18	16	19	17	18	20	24	19	19	16	17	
4	21	12	16	17	17	16	16	16	17	15	13	15	16	16	16	
5	14	13	18	16	14	15	16	14	16	14	15	15	14	14	15	
6	16	17	17	16	14	16	14	13	14	15	16	16	16	15	15	
7	17	17	17	16	17	16	15	16	16	16	19	21	19	20	21	
8	19	21	21	19	20	22	21	22	23	19	19	18	18	19	18	
9	20	20	21	18	22	22	21	21	20	18	19	20	21	17	18	
10	20	20	21	21	21	22	21	20	21	17	17	17	17	16	18	
11	19	17	18	18	21	18	18	15	16	17	17	17	18	20	19	
12	16	16	18	19	17	18	16	17	18	12	17	18	19	16	17	
13	18	18	20	20	19	18	19	15	18	21	21	20	20	19	17	
14	20	20	20	19	20	20	18	19	20	20	19	19	20	20	18	
15	17	23	24	22	23	20	17	19	23	22	21	19	22	22	18	
16	17	18	20	20	20	18	15	18	20	18	21	20	18	20	17	
17	15	16	15	17	17	16	17	17	17	15	14	16	16	17	17	
18	10	11	12	14	11	10	12	10	11	15	16	20	20	17	17	
19	11	12	11	12	12	11	11	12	12	12	12	12	12	13	13	
20	11	11	12	12	12	13	13	14	14	13	18	13	15	16	16	
21	11	12	14	15	10	14	16	15	18	17	19	18	19	19	19	
22	16	19	17	17	16	19	19	20	17	20	19	22	25	22	18	
23	19	18	18	18	16	16	17	18	20	20	20	20	20	19	21	
24	19	18	19	20	20	21	23	23	22	23	25	22	22	22	20	
25	23	24	25	24	25	24	24	22	24	24	28	22	22	23	23	
26	18	20	20	20	18	23	23	22	25	20	22	20	19	24	24	
27	18	20	18	23	18	17	18	17	19	15	14	16	14	16	17	
28	18	18	26	28	28	28	26	25	22	22	21	21	24	22	24	
29	23	22	23	22	20	21	21	22	22	22	20	20	27	26	26	
30	25	22	25	25	23	20	22	22	22	27	24	24	22	23	23	
31	20	20	19	18	18	16	16	16	17	20	18	18	18	18	16	
Mean .	17·7	17·9	19·1	19·1	18·7	18·2	17·6	18·2	18·7	18·2	19·0	19·2	19·3	18·9	18·5	

JULY.

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

(IN MILES PER HOUR.)

Hours.									Mean.	Mean by Beckley's anemograph.	Maximum.		Minimum.		Date.
15—16	16—17	17—18	18—19	19—20	20—21	21—22	22—23	23—24			Time.	Mag.	Time.	Mag.	
											H. M.		H. M.		
16	15	17	17	19	16	18	17	16	16·4	8·2	21 59	37	19 6	6	1
16	18	16	16	17	16	16	14	10	17·8	9·2	10 42	43	22 47	7	2
11	12	11	13	14	11	10	16	7	12·7	6·3	8 15	42	23 52	4	3
14	16	17	17	16	18	12	11	16	16·6	8·9	9 3	37	0 0	4	4
17	13	20	20	19	17	19	18	17	19·7	9·1	13 15	36	4 51	9	5
15	15	14	14	13	13	11	12	12	15·5	6·3	3 25	27	15 10	8	6
12	11	13	12	14	14	11	12	12	11·3	4·3	20 41	17	8 2	6	7
14	13	12	12	11	11	11	11	10	11·1	4·2	14 31	20	6 0	5	8
12	12	11	12	11	11	11	10	10	12·1	4·0	10 15	23	8 56	6	9
11	15	12	10	10	11	10	11	10	11·3	5·0	3 39	23	21 32	3	10
17	14	14	13	14	13	11	12	9	13·4	6·9	14 37	32	10 45	6	11
10	10	11	12	14	9	11	10	10	10·7	5·2	9 57	29	7 56	3	12
18	17	18	20	20	20	19	18	19	18·7	9·3	9 33	30	8 36	8	13
19	20	21	20	19	18	19	17	18	18·8	11·3	3 4	36	4 6	10	14
16	16	18	20	17	15	15	14	15	16·7	9·7	18 35	26	3 56	7	15
17	20	16	17	12	9	13	16	16	16·5	7·8	14 36	33	20 41	6	16
18	20	20	17	17	18	18	18	16	16·8	7·3	17 36	36	8 34	6	17
19	16	16	17	13	20	21	18	18	21·1	8·7	18 7	40	19 48	7	18
22	21	24	23	23	20	20	21	25	30·2	11·3	17 37	40	8 31	7	19
26	24	25	25	24	25	30	23	27	28·9	13·9	21 12	47	20 5	12	20
22	30	27	23	24	20	20	22	25	26·0	11·8	1 19	49	14 26	10	21
20	21	18	19	19	18	16	18	19	20·7	9·4	0 56	45	4 39	8	22
19	19	19	21	20	20	20	20	20	20·0	8·6	1 52	54	10 10	9	23
22	21	20	21	22	25	25	25	20	22·2	10·3	9 49	44	0 25	10	24
23	22	22	20	20	19	20	18	21	20·6	11·2	15 10	34	6 38	10	25
23	20	22	22	22	23	21	22	23	21·3	11·5	13 33	43	2 39	8	26
22	25	24	24	24	24	24	23	25	22·5	12·5	23 55	45	5 36	10	27
22	20	21	24	21	20	20	19	19	23·3	11·7	0 57	42	1 25	9	28
17	18	17	18	18	21	20	19	18	18·4	7·8	2 25	43	7 7	8	29
17	17	17	18	18	20	19	20	20	18·2	7·4	6 41	38	14 7	8	30
19	20	20	19	20	20	20	20	21	20·1	8.6	23 24	38	15 3	9	31
17·5	17·8	17·9	17·9	17·3	17·2	17·1	16·9	17·0	17·7	8·6					Mean.

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19	22	21	18	20	23	18	19	21	21·6	10·0	11 45	41	11 35	9	1
18	18	18	20	18	20	18	23	21	20·6	10·7	22 56	38	6 26	11	2
17	16	15	18	16	14	17	18	16	17·7	9·5	11 37	38	23 39	8	3
16	14	14	12	13	14	15	14	14	15·2	6·4	0 10	37	8 6	7	4
14	14	13	13	12	12	14	14	15	14·3	6·2	3 28	29	4 10	7	5
15	14	12	15	16	15	16	16	19	15·1	6·0	2 21	25	17 10	7	6
20	18	17	18	16	17	17	19	19	17·7	7·6	10 15	32	2 37	8	7
20	18	20	20	18	19	17	18	19	19·6	8·2	23 55	40	11 6	7	8
24	18	12	13	14	16	16	18	18	18·5	8.3	15 18	34	19 33	8	9
18	17	18	18	16	17	17	17	17	18·5	8·3	22 12	34	0 37	9	10
17	17	17	20	20	18	17	19	19	17·7	8·3	22 42	33	13 15	7	11
16	17	20	20	20	18	20	18	19	17·5	8·9	5 44	37	10 22	6	12
18	20	18	18	13	16	17	20	20	18·5	8·7	20 38	37	8 26	8	13
19	20	18	18	18	20	18	18	18	19·1	7·7	2 6	43	7 11	8	14
18	20	17	18	18	18	17	16	19	19·7	10·0	8 10	34	6 45	9	15
19	16	18	16	15	16	13	13	17	17·3	9·5	7 27	32	7 21	8	16
16	16	15	13	16	14	14	13	11	14·8	8·2	5 8	28	6 58	5	17
18	19	18	15	15	15	14	13	11	14·4	7·5	11 33	26	0 37	8	18
14	15	14	14	12	11	10	11	12	12·1	5·0	16 41	20	11 37	7	19
15	15	16	14	14	14	10	9	11	13·3	7·0	15 42	27	22 15	7	20
20	20	20	21	18	20	18	17	18	16·5	10·0	18 4	28	5 7	8	21
17	15	16	17	17	18	18	17	19	18·3	9·0	12 16	39	4 40	8	22
21	23	22	20	20	20	20	20	18	19·3	9·8	11 40	36	5 10	10	23
29	24	26	17	19	22	22	20	23	21·7	13·1	16 58	42	0 1	9	24
26	22	24	20	25	24	22	25	20	23·5	15·5	10 15	38	14 10	11	25
19	20	20	20	23	22	19	22	20	20·8	13·4	5 33	40	2 25	10	26
13	15	16	12	20	17	17	17	17	16·7	10·1	2 59	33	14 13	9	27
26	24	28	24	24	24	23	22	23	23·7	15·7	2 52	43	0 56	11	28
28	26	23	25	24	24	23	22	23	23·6	13·7	13 41	44	4 55	13	29
22	22	18	21	18	20	22	16	18	21·9	9·9	10 42	42	22 35	10	30
12	16	16	15	16	14	8	9	11	19·0	8·7	0 6	33	22 3	4	31
18·8	18·4	18·0	17·5	17·5	17·8	17·1	17·0	17·1	18·2	9·3					Mean.

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

(IN MILES PER HOUR.)

SEPTEMBER.

Date.	Hours.															
	0—1	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12	12—13	13—14	14—15	
1	9	10	13	10	11	11	11	12	12	11	14	13	13	10	9	
2	9	9	9	9	9	9	10	10	10	10	9	9	9	10	11	
3	8	7	7	7	8	8	8	11	10	10	12	12	13	14	14	
4	9	8	8	8	8	8	9	8	8	8	9	9	9	11	12	
5	7	6	6	7	9	14	14	12	7	10	9	11	13	13	13	
6	9	9	9	9	9	9	9	12	13	13	11	10	11	11	12	
7	10	10	7	9	8	9	9	7	8	9	10	11	12	13	15	
8	10	10	10	11	12	10	9	11	10	10	14	16	13	13	17	
9	8	8	10	10	13	12	11	8	13	13	14	14	16	15	14	
10	8	12	12	10	12	12	13	12	13	14	13	12	14	14	17	
11	16	5	8	8	10	11	12	13	12	14	14	11	12	14	14	
12	8	8	10	10	10	9	13	11	4	5	11	10	11	14	14	
13	7	8	7	9	10	9	12	12	9	10	9	9	7	9	11	
14	9	8	8	7	3	5	10	8	7	5	2	8	11	13	14	
15	9	10	7	8	9	10	11	6	5	10	14	14	10	7	8	
16	13	14	15	12	14	15	14	12	14	12	10	12	12	10	9	
17	8	7	6	9	8	8	8	6	3	7	8	12	14	17	17	
18	9	7	6	6	5	7	7	5	5	6	11	15	19	20	21	
19	15	15	15	18	19	19	18	17	19	14	16	13	12	13	14	
20	18	18	18	18	18	14	14	10	17	16	19	16	17	16	17	
21	16	17	17	16	16	17	15	14	15	19	13	15	16	15	16	
22	10	13	9	13	16	16	16	19	20	21	11	14	15	15	14	
23	3	5	10	12	13	8	11	14	14	10	7	9	14	7	8	
24	9	8	10	14	16	13	14	12	11	11	11	12	11	12	12	
25	14	15	16	16	17	16	18	17	16	17	15	15	14	15	11	
26	7	10	9	9	9	11	11	10	9	5	7	12	14	16	16	
27	11	7	8	8	9	10	10	10	8	8	10	11	13	15	11	
28	14	14	13	12	10	10	8	8	10	12	16	18	20	20	21	
29	13	15	16	16	15	13	12	10	7	8	13	14	13	12	7	
30	5	8	13	12	10	8	9	9	10	10	12	13	12	12	15	
Mean . .	9·9	10·0	10·6	10·7	11·1	11·0	11·5	10·9	10·6	10·9	11·2	12·2	12·9	13·3	13·3	

OCTOBER.

1	8	7	6	6	5	5	3	3	8	9	11	11	12	14	14	
2	9	8	9	10	11	9	8	11	20	19	13	10	8	8	9	
3	16	9	13	14	16	16	13	11	11	14	11	8	9	13	15	
4	18	18	17	22	19	17	18	17	19	19	19	11	22	18	14	
5	18	18	17	17	14	14	13	16	16	12	16	17	20	24	23	
6	18	17	17	17	16	15	17	16	19	18	13	16	15	14	13	
7	9	9	7	7	7	6	10	10	11	10	10	10	11	13	15	
8	6	8	9	9	9	11	9	11	11	10	6	10	14	14	15	
9	9	8	9	9	7	9	4	4	6	5	5	5	10	13	16	
10	9	11	12	12	13	11	8	8	7	8	3	6	13	14	16	
11	13	15	16	16	12	9	8	6	7	6	3	12	15	15	16	
12	12	12	12	10	11	10	9	7	7	5	10	13	14	16	19	
13	11	10	13	10	8	9	9	6	9	12	12	12	14	16	16	
14	10	12	11	10	8	10	10	11	10	10	8	5	12	14	15	
15	9	10	8	9	9	10	11	11	9	9	7	9	10	14	16	
16	9	6	6	7	7	8	8	10	11	10	9	7	7	9	11	
17	1	1	1	12	13	12	8	13	13	11	14	16	12	13	9	
18	11	8	7	8	11	11	8	8	9	7	6	10	12	14	13	
19	6	8	7	2	1	1	2	2	1	8	8	10	13	15	16	
20	10	7	7	8	8	9	10	9	11	11	7	9	7	20	11	
21	7	9	7	11	8	6	12	15	14	14	13	11	12	14	16	
22	16	15	10	11	9	9	10	10	10	10	8	8	12	14	15	
23	10	9	11	13	15	13	12	12	9	8	5	4	4	4	5	
24	11	12	9	7	9	6	4	10	12	12	12	16	17	15	12	
25	16	13	11	11	12	12	12	8	11	12	14	12	10	11	12	
26	5	10	13	11	11	11	5	11	12	11	13	15	14	12	10	
27	8	8	10	11	11	10	11	11	14	14	12	9	13	14	14	
28	12	11	11	11	11	11	10	12	11	10	11	11	17	17	20	
29	13	10	13	15	13	13	13	13	10	9	14	19	20	20	20	
30	10	9	8	10	14	13	10	13	14	10	8	15	18	19	20	
31	11	8	10	12	13	10	9	8	8	10	6	8	12	14	16	
Mean . .	10·6	10·2	10·2	10·8	10·5	10·1	9·4	10·2	10·8	10·6	9·9	10·8	12·9	14·0	14·6	

SEPTEMBER. (Averages for periods of sixty minutes from full hour to full hour of local mean time.) (IN MILES PER HOUR.)

Hours.											Mean.	Mean by R. Beckley's* Anemograph.	Maximum.		Minimum.		Date.
15—16	16—17	17—18	18—19	19—20	20—21	21—22	22—23	23—24					Time.	Mag.	Time.	Mag.	
													H. M.		H. M.		
10	12	11	10	10	11	10	10	10	11·0	4·4	9	57	23	2	11	4	1
12	11	11	10	9	9	8	7	8	9·5	3·9	14	40	15	10	51	4	2
14	13	12	12	10	9	9	9	10	10·2	4·7	13	52	19	6	11	4	3
11	11	14	9	7	6	5	7	8	8·7	3·5	14	6	16	7	33	4	4
12	12	11	11	10	10	9	9	9	10·2	5·3	9	31	20	8	4	2	5
12	13	12	10	11	11	10	9	9	10·5	4·6	16	41	18	11	40	5	6
19	M	17	10	7	8	9	10	11	10·6	4·7	15	10	30	7	38	3	7
12	11	10	11	10	14	8	11	8	11·3	5·7	20	33	28	8	55	4	8
13	13	13	11	10	10	18	10	4	11·5	4·7	21	21	32	1	38	3	9
20	16	13	18	20	16	14	12	11	13·8	7·0	13	52	30	0	1	4	10
13	14	14	13	12	11	10	9	8	11·5	4·4	13	10	23	1	45	4	11
13	15	10	8	6	2	2	2	4	8·7	3·8	2	47	23	22	38	0	12
12	14	13	12	10	9	8	8	9	9·7	3.7	18	20	24	3	26	3	13
14	14	13	12	10	9	7	7	8	8·8	3·8	15	9	18	11	12	1	14
11	12	11	11	11	10	7	3	13	9·6	4·3	11	10	20	8	36	1	15
10	8	8	6	6	6	4	3	4	10·2	5·3	2	2	18	23	26	3	16
14	14	11	4	3	7	8	10	10	9·2	4·3	14	10	28	20	14	1	17
21	19	17	15	16	12	14	15	16	12·3	6·4	14	14	28	4	50	2	18
14	13	14	14	11	9	6	4	9	13·9	7·7	1	55	28	22	10	4	19
19	18	16	13	14	10	9	12	17	15·6	7·9	4	38	28	22	28	5	20
16	14	14	19	11	11	14	14	10	14·9	6·3	18	18	28	16	41	6	21
13	14	14	14	12	13	10	8	4	13·5	6·4	9	15	26	23	59	3	22
9	3	3	3	7	9	11	8	8·8	2·6	12	35	21	18	16	1	23	
10	10	9	10	11	10	13	15	16	11·6	5·7	22	50	21	2	34	5	24
7	4	7	8	3	3	3	4	6	11·5	5.0	3	18	22	22	16	1	25
16	15	15	15	14	12	11	10	12	11·5	6·0	14	42	22	9	35	3	26
17	18	17	16	15	15	14	14	14	12·0	6·1	17	6	26	9	54	4	27
23	23	22	20	18	16	15	16	14	15·6	7·9	15	49	31	7	27	2	28
11	11	11	10	11	9	10	8	7	10·7	4·4	2	18	21	10	36	2	29
15	15	13	12	9	9	9	9	8	10·7	5·2	14	54	19	1	30	1	30
13·8	13·2	12·5	11·7	10·5	10·0	9·5	9·0	9·5	11·2	5·2							Mean.

OCTOBER.

15	14	13	10	6	7	7	6	7	8·6	4·0	15	16	18	6	7	3	1
15	15	11	12	8	10	10	10	13	11·1	5·0	7	58	30	1	30	4	2
13	14	15	14	14	15	13	14	15	13·1	6·7	0	14	22	11	40	3	3
17	23	24	23	23	21	18	17	15	18·6	11·6	12	39	30	12	34	10	4
24	23	17	15	14	14	14	17	19	17·1	9·8	13	31	31	17	34	8	5
10	10	9	7	5	5	4	8	7	12·7	6·6	8	36	24	19	35	3	6
16	16	14	11	10	10	9	10	9	10·4	5·1	14	56	22	23	59	5	7
17	18	18	16	15	12	11	10	8	11·6	5·7	16	10	24	10	53	2	8
16	16	16	15	14	12	10	11	10	9·8	4·6	15	47	24	7	9	0	9
16	17	16	16	15	13	12	11	11	11·6	5·7	15	57	24	10	45	0	10
17	20	21	18	14	10	10	10	11	12·6	6·2	17	17	28	10	39	0	11
20	19	18	18	17	14	11	11	13	12·8	6·3	16	39	26	9	61	0	12
17	19	19	17	16	14	10	9	9	12·1	5·8	16	41	26	8	29	1	13
16	15	12	11	11	8	9	9	9	10·7	4·8	14	28	20	10	54	3	14
18	17	17	15	13	9	8	9	10	11·1	5·2	14	31	23	8	23	4	15
12	14	14	12	13	11	8	9	4	9·3	4·2	16	50	20	23	57	0	16
9	9	6	4	8	4	13	14	13	9·3	4·7	11	29	20	0	0	0	17
13	12	11	8	7	4	2	4	3	8.6	4·1	13	21	18	10	36	0	18
14	14	8	16	13	9	5	8	9	8·2	4·2	16	46	31	8	9	0	19
14	16	16	18	17	19	18	9	8	11·2	5·0	20	44	24	12	10	4	20
23	23	25	22	17	14	17	17	15	14·3	7·5	17	17	24	2	7	2	21
18	16	15	15	14	12	11	11	11	12·1	5·5	1	4	25	2	38	6	22
9	10	11	11	12	11	11	12	11	9·7	4·0	4	54	20	12	5	4	23
15	14	20	20	23	22	24	14	14	13·6	7·1	21	17	30	6	45	1	24
11	11	13	14	10	9	8	6	9	10·8	4·7	0	28	20	23	45	5	25
9	9	9	8	8	9	9	9	9	10·1	4·5	11	50	18	6	7	2	26
15	16	18	20	19	18	15	12	12	13·1	6·6	17	38	26	11	30	2	27
22	22	23	21	20	18	15	15	14	14·8	7·6	16	11	30	8	52	5	28
21	22	20	17	16	16	12	10	15·2	7·8	13	49	31	9	49	4	29	
21	22	20	20	18	16	13	13	12	14·4	7·4	16	20	28	9	27	4	30
17	17	16	16	15	13	10	10	7	11·5	5·6	15	32	22	11	0	3	31
15·8	16·2	15·6	14·8	13·7	12·2	11·3	10·9	10·4	11·9	5·9							Mean.

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

NOVEMBER. (IN MILES PER HOUR.)

Date.	Hours.															
	0—1	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12	12—13	13—14	14—15	
1	7	4	6	10	9	9	9	11	13	12	9	12	10	10	11	
2	5	10	9	9	10	13	11	13	10	10	10	14	10	10	13	
3	9	9	13	13	12	13	13	6	10	9	9	8	9	12	13	
4	9	10	12	11	13	13	14	16	13	10	9	9	8	9	10	
5	6	7	8	9	10	13	13	14	16	16	14	11	15	13	14	
6	11	11	12	15	17	17	17	12	12	12	11	10	9	10	14	
7	11	11	12	15	15	14	16	14	11	11	8	7	8	9	12	
8	7	5	6	9	12	9	9	12	11	11	9	8	8	10	11	
9	7	6	6	7	11	10	13	13	12	6	4	4	8	10	10	
10	6	9	9	9	10	10	11	10	13	12	10	7	7	9	10	
11	9	8	6	11	12	14	13	13	10	7	5	7	7	8	10	
12	7	7	9	11	11	12	13	12	11	12	10	10	8	9	11	
13	7	8	7	6	11	11	10	8	8	8	7	7	6	7	8	
14	7	9	8	9	9	11	12	13	12	11	7	7	7	6	11	
15	9	8	10	14	14	14	16	16	13	10	9	7	11	14	13	
16	8	6	11	10	12	12	10	12	12	9	5	5	7	8	9	
17	4	7	9	10	10	11	11	10	11	11	10	8	7	11	14	
18	7	5	8	9	10	11	10	9	11	11	7	7	7	11	14	
19	3	2	4	11	11	10	12	13	13	13	15	11	8	14	14	
20	5	8	10	11	9	10	11	11	11	12	10	10	8	10	12	
21	10	8	10	12	11	11	12	12	12	11	9	8	8	7	12	
22	10	10	10	8	11	13	14	11	10	10	14	17	20	17	20	
23	5	7	9	10	9	11	10	8	10	7	3	6	9	12	13	
24	5	4	4	6	11	12	10	11	13	11	10	9	7	10	11	
25	9	10	6	7	12	10	12	10	10	9	10	7	7	10	13	
26	8	10	10	11	14	16	17	14	12	12	11	7	9	10	12	
27	8	10	10	12	13	12	15	14	13	11	11	9	7	9	12	
28	11	10	10	10	9	12	11	10	9	10	6	11	11	15	19	
29	10	10	10	9	9	10	10	11	12	11	11	9	9	9	9	
30	10	12	13	16	14	10	9	9	11	12	8	13	18	17	19	
Mean . .	7·5	7·9	8·9	10·3	11·3	11·8	12·1	11·6	11·5	10·5	9·0	8·8	9·7	10·5	12·	

DECEMBER.

1	9	10	10	11	9	9	9	10	10	10	7	8	12	14	14	
2	11	10	8	8	11	10	9	7	12	12	8	14	26	20	21	
3	16	13	11	13	12	12	12	12	14	15	30	22	25	24		
4	11	12	14	13	13	14	12	11	13	10	14	13	14	13	13	
5	9	8	8	5	7	8	13	14	13	10	8	7	7	12	13	
6	4	6	9	9	13	13	12	14	14	11	10	7	8	14	13	
7	12	11	12	13	10	16	15	15	13	10	7	7	9	10	12	
8	10	11	9	11	10	13	14	10	13	10	9	13	15	17	18	
9	8	11	11	11	12	13	16	13	11	10	9	7	13	16		
10	9	11	15	15	14	14	13	17	17	13	14	9	9	13	15	
11	6	8	11	11	14	16	15	13	11	12	10	7	6	8	9	
12	7	11	6	7	9	8	5	9	8	6	6	7	10	10		
13	9	10	8	8	6	7	10	10	9	10	9	11	14	15		
14	8	7	5	6	7	11	13	11	12	13	10	7	7	10	13	
15	10	9	6	9	10	12	10	10	10	11	10	9	11	14	16	
16	7	9	7	9	11	10	9	10	14	12	11	9	8	8	10	
17	11	12	11	9	10	10	12	9	10	8	8	8	8	10	14	
18	9	10	13	12	15	13	12	13	13	12	10	11	10	10	14	
19	12	13	14	14	15	15	16	14	11	11	11	11	11	11	11	
20	11	15	16	15	16	14	15	16	14	14	11	9	11	11	14	
21	10	14	16	18	18	19	18	20	20	20	16	11	10	10	12	
22	11	12	13	15	14	17	18	18	18	18	17	15	14	12	9	10
23	10	12	14	14	15	17	16	18	18	18	17	16	12	12	11	
24	6	9	11	14	14	17	18	15	13	12	12	8	9	8	13	
25	6	10	11	12	12	12	13	13	14	13	13	10	9	11	12	
26	9	10	9	11	13	12	16	14	14	11	9	7	9	12	13	
27	11	9	10	9	9	9	10	9	10	10	9	7	10	13	14	
28	8	8	11	11	9	8	9	8	7	14	18	18	20	22	21	
29	9	11	12	11	10	10	10	9	8	11	9	9	14	16	16	
30	12	10	10	8	10	8	8	7	10	10	10	17	22	20	22	
31	14	15	16	17	15	14	14	11	9	8	8	13	17	20	21	
Mean . .	9·5	10·4	11·1	11·2	11·8	12·2	12·5	12·2	12·4	11·8	10·6	10·4	11·6	13·3	14·5	

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

NOVEMBER. (IN MILES PER HOUR.)

Hours.									Mean.	Mean by R. Beckley's anemograph.	Maximum.		Minimum.		Date.
15—16	16—17	17—18	18—19	19—20	20—21	21—22	22—23	23—24			Time.	Mag.	Time.	Mag.	
											H. M.		H. M.		
10	12	12	13	13	11	9	6	5	9·7	4·1	18 30	17	6 14	4	1
14	14	13	14	14	9	4	8	9	10·7	4·8	11 40	21	6 59	3	2
13	13	15	15	11	7	8	8	10	10·7	5·0	17 54	20	7 22	1	3
12	12	13	14	16	13	9	9	7	11·3	5·2	7 18	21	23 56	5	4
12	12	13	17	17	17	13	7	9	12·3	5·6	18 35	23	0 11	4	5
16	16	18	20	20	18	10	10	9	13·6	6·5	19 10	26	12 51	6	6
14	13	13	16	17	14	9	9	6	11·9	5·6	19 15	22	23 46	4	7
14	14	13	14	12	10	8	8	9	10·0	4·4	15 47	18	0 3	3	8
13	15	13	13	15	14	11	9	9	9·9	4·5	19 46	19	11 55	3	9
11	11	10	13	14	10	8	6	9	9·7	4·1	19 33	19	0 51	3	10
10	11	11	10	8	9	9	7	6	9·2	3·8	5 35	18	9 41	4	11
12	12	13	15	14	11	11	10	8	10·8	4·9	6 10	19	1 24	5	12
7	9	10	11	13	13	9	7	7	8·3	3·3	20 5	18	1 29	2	13
12	15	15	12	12	10	10	8	8	10·0	4·1	17 5	21	13 43	3	14
13	13	12	10	11	10	9	8	3	11·2	5·1	7 43	22	23 20	3	15
11	13	11	11	13	10	7	7	7	9·2	4·1	19 45	19	0 0	3	16
14	12	11	11	10	8	8	9	8	9·8	4·2	14 31	18	0 25	3	17
16	15	14	14	15	12	9	8	6	10·3	4·6	15 55	21	1 9	1	18
19	20	20	19	18	16	13	11	7	12·4	6·3	17 13	27	0 30	1	19
12	14	14	13	13	13	10	10	10	10·4	5·1	17 32	19	0 9	5	20
12	12	14	15	17	13	10	9	9	11·0	4·7	18 59	21	12 4	6	21
22	21	20	20	22	18	12	13	8	14·6	7·4	19 18	31	8 46	4	22
13	14	14	16	16	17	13	11	8	10·5	4·7	20 10	22	10 31	0	23
11	11	10	10	10	10	7	9	9	9·2	3·8	8 15	17	3 23	2	24
14	14	15	16	16	12	11	10	11	10·9	4·8	18 33	23	2 21	5	25
12	13	13	15	14	10	10	11	9	11·7	5·4	19 18	26	1 14	5	26
12	13	13	14	14	13	9	11	11	11·5	5·2	18 45	20	13 11	6	27
16	15	16	17	20	17	15	12	11	12·6	6·0	14 34	26	11 2	3	28
9	9	8	8	10	10	11	11	11	9·7	3·0	8 54	15	4 11	5	29
20	20	21	20	18	14	11	11	10	14·0	6·7	15 25	27	5 17	5	30
13·2	13·6	13·8	14·2	14·4	12·3	9·8	9·1	8·3	10·9	4·9					Mean.

DECEMBER.

12	11	11	11	14	15	12	15	13	11·1	4·4	23 2	19	11 9	4	1
2	21	21	21	20	18	16	15	16	14·7	7·2	15 12	30	7 51	4	2
26	25	26	25	21	17	14	14	11	17·1	9·0	13 7	36	8 21	7	3
15	18	20	20	19	15	13	12	11	13·4	6·7	19 42	25	9 38	3	4
14	12	13	16	16	14	14	11	8	10·7	5·0	19 5	22	3 13	5	5
14	11	12	16	16	13	11	9	11	11·4	6·0	21 1	22	1 25	2	6
15	19	18	18	17	14	10	12	10	13·0	6 3	16 36	27	9 57	5	7
19	21	21	20	17	16	13	11	11	14·0	6·9	16 58	30	10 38	4	8
16	20	20	20	18	15	12	10	10	13·3	6·4	18 10	27	12 48	5	9
16	18	17	19	18	15	11	10	5	13·6	6·7	10 11	26	23 19	5	10
10	13	14	17	16	13	11	9	8	11·2	5·3	18 53	22	13 2	6	11
10	11	11	11	10	12	12	9	9	8·6	3·2	16 35	19	7 51	2	12
15	15	13	12	10	8	9	10	10	10·6	4·5	14 35	21	11 26	4	13
15	14	15	19	18	16	11	10	10	11·1	5·1	18 41	25	3 9	4	14
15	16	17	18	17	14	12	11	7	11·8	5·8	17 57	25	2 42	4	15
12	15	15	20	20	16	14	9	11	11·9	5·6	20 20	30	13 13	5	16
15	15	16	17	17	17	14	13	9	13·6	6·4	20 7	25	11 53	5	17
16	21	21	21	24	22	13	12	10	14·0	7·3	20 5	33	1 4	6	18
18	21	24	24	21	22	19	12	11	15·3	8·1	17 14	34	0 18	7	19
17	20	24	22	22	17	14	11	9	14·9	7·9	17 47	33	11 5	7	20
15	20	24	24	22	22	13	9	10	14·3	9·0	18 18	34	14 21	7	21
13	14	19	18	20	16	14	14	10	14·6	7·5	19 32	26	14 15	7	22
13	18	21	20	18	19	14	9	8	15·0	7·7	17 50	25	23 15	5	23
15	17	18	18	18	16	13	14	7	13·2	6·9	18 31	25	0 20	5	24
12	13	14	14	14	14	12	8	8	11·6	5·6	8 55	19	0 36	4	25
14	16	15	16	14	8	7	10	11	11·7	5·6	16 59	21	20 31	5	26
14	14	14	15	15	12	9	11	10	11·0	4 8	19 40	21	11 48	4	27
20	20	21	20	17	15	13	12	10	14·2	7·3	13 6	30	8 33	4	28
17	17	18	21	21	19	12	11	10	13·1	6·5	19 27	33	8 12	4	29
22	24	21	18	16	14	20	17	16	14·6	7·3	16 41	33	7 24	3	30
24	24	24	22	21	18	18	16	14	16·5	8·3	16 58	35	9 45	1	31
15·9	17·3	18·0	18·4	17·7	15·9	13·2	11·8	10·0	13·1	6·4					Mean.

JANUARY. (Averages for periods of sixty minutes from full hour to full hour of local mean time.)

Date.	Hours.											
	0—1	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12
1	NNE	N	N	N	N	N	N	N	N	N	NNE	N
2	NNE	NNE	NE	ENE	ENE	NE	NE	NE	NE	NE	NE	NE
3	NE	NE	NE	NE	ENE	ENE	ENE	ENE	NE	ENE	NE	NE
4	NE	NNE	NE	NE	ENE	ENE	E	ENE	ENE	NE	NE	NE
5	NE	NE	NE	NE	NE	NE	NE	NE	ENE	NE	NE	NE
6	NE	NNE	NE	E	E	E	ENE	ENE	E	ENE	NE	NE
7	NNE	NNE	NE	E	NE	ENE	ENE	ENE	NE	NE	NE	NE
8	NNE	ENE	ENE	E	ENE	NE	NE	ENE	NE	NE	NE	NW
9	N	NNE	NE	NNE	ENE	ENE	ENE	E	E	ENE	ENE	ENE
10	NNE	N	N	NNE	ENE	ENE	ENE	ENE	NE	NE	NE	NE
11	NNE	N	NNE	NNE	ENE	ENE	NE	E	NE	NE	NE	NW
12	NNE	ENE	ENE	ENE	NE	NE	NE	NE	NE	NE	NE	NE
13	N	N	N	N	NNE	NNE	NE	NE	ENE	ENE	NE	ENE
14	ENE	ENE	ENE	ENE	ENE	ENE	ENE	NE	ENE	ENE	ENE	ENE
15	NE	NE	NE	NE	NE	NE	NE	NE	E	ENE	E	E
16	E	E	ENE	ENE	NNE	NNE	ENE	ESE	ESE	ENE	NE	W NW
17	N	NE	NE	NNE	NNE	N	N	NNE	NE	ENE	ENE	NNW
18	ENE	NE	E	NE	NE	E E	N	NNE	N	ENE	NE	NW
19	NNE	N	N	N	NNE	NE	E	ENE	ENE	NE	NNW	NNW
20	NE	N	N	N	N	N	ENE	ESE	NE	NE	NW	NNW
21	N	N	N	N	N	N	N	N	NE	NE	NE	NW
22	NNE	NE	NE	NE	N	N	N	N	ENE	NE	NW	NW
23	N	N	N	N	NNE	NE	NNE	NE	ENE	ENE	NE	NW
24	N	N	NNE	N	NNE	NNE	NNE	NNE	NNE	NNE	NNW	NNW
25	N	N	N	N	NE	E	ENE	ENE	ENE	ENE	NE	NNW
26	NNE	N	NNE	NNE	NNE	N	N	NNE	NE	NE	NNW	NW
27	NNE	NE	NNE	E	E	ESE	ENE	NE	NE	NE	E E	NNW
28	N	N	N	N	N	N	N	N	N	NNW	NNW	NNW
29	N	N	N	N	N	N	N	N	N	N	N	N
30	N	N	N	N	N	N	N	N	N	N	N	N
31	N	N	N	N	N	N	N	N	N	NNW	NNW	NNW
Mean direction.	NNE	NNE	NNE	NNE	NE	NE	NE	NE	NE	NE	NNE	N

FEBRUARY.

1	N	N	N	N	N	N	NNE	N	N	NNW	NNW	NNW
2	N	N	NNE	N	N	N	N	N	N	NNW	NNW	N
3	NNE	N	N	N	N	N	N	N	NNE	NNE	NE	NE
4	NNE	NNE	NE	NNE	NNE	NNE	NNE	NNE	NNE	N	NNW	NNW
5	NE	NNE	NNE	NNE	NNE	NNE	NE	ENE	NE	NE	NE	NE
6	E	ENE	ENE	ENE	NNE	NE	NE	NE	ENE	NE	NE	WNW
7	N	N	NNW	N	N	N	NNE	N	N	NNW	NNW	NNW
8	N	N	NNE	N	NE	ENE	ENE	NNE	N	NE	ENE	NW
9	N	W NW	N	E	ENE	ESE	ENE	NE	E	E	WNW	WNW
10	N	N	NNE	N	N	ENE	E E	ENE	ENE	ESE	ESE	W W
11	N	ENE	ESE	ESE	ESE	ESE	NE	E	E	E	E	SW
12	S	SE	NE	NE	N	N	NE	ENE	ENE	NW	NW	NW
13	N	N	N	N	N	N	NNE	NNE	NNE	NE	NW	NW
14	N	N	N	N	N	N	N	N	NNE	N E	NE	NW
15	N	N	N	N	N	N	N	N	N	NE	NNW	NNW
16	N	NNE	NNE	NE	NNE	NE	NE	ENE	ENE	ENE	ENE	NW
17	NE	NE	N	NN	N	NNE	NNE	ESE	ENE	ENE	NE	W
18	ENE	E	NNE	N	NNE	NNE	E E	ENE	NE	NNE	NW	NNW
19	NNW	NNW	NNW	N	N	N	N	N	N	NNW	NNW	NNW
20	N	N	N	N	N	ENE	ENE	ENE	ENE	ENE	W W	NW
21	N	N	N	N	N	N	NNE	N	N	NNW	NNW	NW
22	N	N	N	NNE	NE	NE	E E	ENE	NE	NE	NE	W W
23	NE	NE	NNW	NNW	NNW	NE	NE	ENE	E	ENE	NE	NE
24	SE	SE	ESE	E	ENE	E	ENE	ENE	NE	NE	NE	W W
25	N	NNW	NNW	N	N	N	NNE	NE	NE	NE	NE	W W
26	N	N	N	NNE	ENE	ENE	E E	NE	ENE	NE	ENE	W W
27	NNW	NNW	N	N	N	N	NE	ENE	E	ENE	ENE	SE
28	E	E	N	N	N	E	ENE	NE	NE	NE	NE	W
29	CALM	CALM	CALM	NNW	N	NE	NE	E	NE	NE	NW	NW
Mean direction.	NNE	N	N	N	NNE	NNE	NE	NE	NE	NNE	N	NW

JANUARY. (Averages for periods of sixty minutes from full hour to full hour of local mean time.)

Hours.												Mean direction	Date.
12—13	13—14	14—15	15—16	16—17	17—18	18—19	19—20	20—21	21—22	22—23	23—2		
NW	NW	NW	NNW	NNW	NNW	N	N	N	N	N	N	N	1
NW	NW	NW	NW	NNW	NNW	N	N	N	NNE	E	NE	NNE	2
NE	NE	WNW	NW	NW	NW	NW	NNW	N	N	N	NE	NNE	3
NE	WNW	NW	NW	NW	NW	NNW	N	N	N	N	NE	NNE	4
NW	NNW	NNW	NW	NNW	N	N	N	N	NNE	ENE	ENE	NNE	5
NE	NW	NW	NW	NW	NNW	N	N	N	N	NE	NE	NNE	6
NE	WNW	NW	NW	NW	NW	NNW	NNW	N	N	N	N	NNE	7
NW	NW	NW	NW	NW	NW	NW	N	N	N	ENE	ENE	NNE	8
WNW	NW	NNW	NNW	NNW	NNW	N	N	N	N	NE	ENE	NNE	9
NW	NW	NW	NW	NW	NW	NW	NNW	NNW	N	N	NE	N	10
NW	NW	NW	NNW	NNW	NNW	NNW	NW	NE	NNE	NE	E	N	11
W	NW	NW	W	NW	NNW	NNW	NNW	N	NNE	N	N	N	12
ENE	WNW	WNW	NW	NW	NW	NNW	NNW	N	N	NE	ENE	N	13
W.W	W	W	W.W	NW	NW	NNW	NNW	NNW	N	NE	NE	NNE	14
E	NW	NW	NW	NW	NW	NNW	NNW	N	N	N	NE	NNE	15
NW	NW	NW	NNW	NNW	NNW	N	N	N	N	N	N	NNE	16
W	NW	NW	NW	NW	NNW	NNW	N	N	N	N	NE	N	17
NW	NW	NW	NW	NW	NNW	NNW	N	N	N	N	NNE	N	18
NNW	NNW	NNW	NNW	NNW	NNW	NNW	N	N	N	N	NE	N	19
NNW	NNW	NNW	NNW	NNW	NNW	NNW	N	N	N	N	N	N	20
W	NW	NW	W	NW	NNW	N	N	N	N	N	NNE	NNW	21
NW	NW	NW	NW	NW	NW	NNW	N	N	N	N	N	NNW	22
NW	NW	NW	NW	NW	NW	NW	NW	NNW	NNW	NNW	N	NNW	23
NW	NW	NW	NW	NNW	NNW	NNW	NNW	N	N	NE	N	NNW	24
NW	NW	NW	NW	NW	NW	NNW	NNW	NNW	N	N	N	N	25
NW	W	NW	NW	NW	NW	NNW	NNW	NNW	NNW	N	NNE	NNW	26
NNW	NW	NW	NW	NW	NW	NW	NNW	NNW	N	N	N	N	27
NNW	NNW	NNW	NNW	NNW	NNW	NNW	N	N	N	N	N	NNW	28
NNW	NNW	NNW	NNW	NNW	N	N	N	N	N	N	N	N	29
NNW	NNW	NNW	NNW	NNW	NW	N	N	N	N	N	N	N	30
NW	NNW	NNW	NNW	NNW	NNW	N	N	N	N	N	N	NNW	31
NNW	NW	NW	NW	NNW	NNW	NW	N	N	N	N	NNE	N	Mean direction.

FEBRUARY.

NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	N	N	N	N	NNW	1
NNW	NNW	NNW	NNW	NNW	NNW	NNW	N	N	N	N	N	NNW	2
NE	WNW	NW	W	NW	NW	NW	NNW	N	NNE	E	NE	N	3
NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	N	N	NE	NN	N	4
NNW	NW	NW	NW	NW	NW	NNW	N	N	N	N	NE	N	5
WNW	NW	N	NW	NW	NW	NNW	NNW	NNW	N	N	N	N	6
NNW	NNW	NNW	NNW	NNW	NNW	N W	NNW	N	N	N	N	NNW	7
NW	NW	NW	NW	NW	NW	NNW	NNW	NNW	N	N	N	NNW	8
WNW	WNW	NW	NW	NNW	NW	NW	NNW	NNW	N	N	N	NNW	9
W W	NW	NW	W W	NW	NW	NNW	NNW	N	N	N	NNW	NNW	10
SW	SW	SW	WNW	WNW	NW	NNW	N	N	N	N	N	NW	11
NNW	NW	NW	NW	NW	NW	N W	N	N	N	N	N	NNW	12
W	NW	NW	NW	NNW	NNW	NNW	N	N	NNE	N	N	NNW	13
NW	NW	NW	NW	NW	NW	NNW	N	NNW	N	N	N	NNW	14
NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	N	N	N	N	N	15
NW	NW	NW	W W	NW	NNW	NNW	NNW	N	N	N	N	N	16
WNW	WNW	WNW	WNW	NW	NW	NW	NNW	NNW	N	N	N	NNW	17
NNW	NW	NW	NW	NW	NNW	NNW	NW	N	N	N	N	NNW	18
NNW	WNW	NW	NNW	NNW	NNW	NNW	NW	N	N	N	N	NNW	19
NW	NW	NW	N W	NNW	NNW	NNW	N	N	NNW	NNW	N W	NNW	20
NW	W	NW	NW	NW	NW	NW	NW	NW	W	NW	NW	NNW	21
NW	NW	NW	NW	NW	NNW	NNW	NNW	NW	N	N	NNE	NNW	22
W	WNW	NW	W W	WNW	NW	NW	N	N	NNW	N	SE	NW	23
NW	WNW	NNW	W W	NW	W	NNW	NNW	N	NNE	N	N	NNW	24
WNW	NW	WNW	NW	NW	NNW	NNW	NNW	NW	N	N	N	NNW	25
WNW	W NW	WNW	WNW	N	NW	NW	NNW	N	NNW	W	W W	NNW	26
NW	W	W W	W W	W	W W	NW	NNW	NE	NE	E	E	NNW	27
WNW	WNW	WNW	WNW	WNW	WNW	NW	NW	W W	NNW	NN	NW	NW	28
NW	NW	NW	NW	NW	NW	NW	NNW	NNW	NNW	W	NNW	NNW	29
NW	NW	NW	NW	NW	NW	NNW	NNW	N	N	N	N	NNW	Mean direction.

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

MARCH.

Date.	Hours.											
	0—1	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12
1	NNW	N	N	N	N	N	N	NE	NE	NNE	Variable	WNW
2	N	NE	NE	NNE	NE	NE	NE	NNE	NE	ENE	NW	NW
3	N	NNE	NNE	NNE	NNE	NNE	NNE	NE	N	NW	NW	NW
4	NW	NNW	NNW	N	N	NNE	NNE	NE	ENE	ENE	ESE	W
5	NNW	NNW	NE	ESE	ESE	NE	NE	ENE	E	E	NW	NNW
6	N	N	N	N	N	N	N	N	NNE	NE	E	WNW
7	N	N	N	N	N	N	N	NNE	NE	NE	NW	NW
8	NNW	NNW	N	N	NNE	NNE	NNE	NNE	N	NNW	NNW	WNW
9	N	N	NNE	N	N	N	N	NE	ENE	W	W W	NW
10	N	N	N	N	N	NE	ENE	NE	N	N	NNW	NW
11	NNW	NNW	NNW	NNW	NNW	N	N	N	N	NNW	NW	NNW
12	NNW	NNW	NNW	NNW	N	N	N	N	NNW	NNW	WNW	WNW
13	NNW	NNW	NNW	NNW	N	N	WNW	ESE	SE	SSE	SSW	SW
14	SSW	WSW	WSW	W	W	Calm	W	ESE	SE	SE	SE	WSW
15	NNE	N	NNW	SE	SE	ESE	ESE	NE	NE	SE	SW	WSW
16	S	S	SSW	SW	S	W	Calm	SSE	E	SE	S	SSW
17	ESE	Calm	ESE	ESE	W	SW	WSW	SSW	S	SSE	SW	SW
18	SSW	SSW	NW	NNW	N	E	E	ENE	ESE	ESE	SW	WSW
19	N	N	N	N	N	W	NE	NE	NE	NE	W W	WNW
20	NNW	NNW	N	N	N	N	E E	NE	NE	NE	WNW	WNW
21	NNW	N	N	N	N	NNE	NNE	N	NE	WNW	WNW	SW
22	WNW	WNW	NNW	N	N	E E	E E	ENE	SE	SSW	SW	WSW
23	NW	WNW	Calm	Calm	ESE	ESE	ESE	ESE	ESE	SE	SE	SW
24	N	N	N	N	N	NNE	NNE	N	NNW	NNW	NNW	NW
25	NNW	N	N	N	N	N	NNE	N	N W	NW	NW	NW
26	NNW	NNW	N	N	N	N	N	N	NNW	NW	NW	NW
27	NNE	N	N	NNW	NNW	NNW	ESE	SSE	SSE	S	SSW	WSW
28	NW	SSW	SW	SSW	SSW	SE	SE	SSE	SSE	S	SSW	SW
29	N	N	N	N	NE	ENE	SE	ESE	WNW	W	WNW	W W
30	NNW	N	NE	NW	NW	N	SE	SE	SE	W	N	WNW
31	SW	SW	SW	SE	SE	SE	SE	SE	WSW	SW	SW	WSW
Mean direction.	NNW	NNW	N	N	N	NNE	NE	NE	ENE	NNW	WNW	WNW

APRIL.

1	N	N	N	NNE	N	NNE	NNW	NNW	NNW	WSW	W	WSW
2	SSW	SW	WSW	WSW	SW	ESE	ESE	SE	SSE	SSE	SSW	SW
3	S	S	SSE	SSW	SSW	SSW	SSE	ESE	ESE	SSE	S	SW
4	S	SSW	SW	SSW	SSW	SW	WSW	Calm	NE	NE	WNW	WSW
5	WNW	WNW	WNW	NNW	NNW	N	N	NE	NE	NE	ENE	WNW
6	NNW	N	N	NE	ESE	ESE	NNE	ESE	ENE	E	ESE	W
7	SSW	SSW	SSW	SW	SW	WSW	WSW	SSW	SSW	SW	SSW	SW
8	SW	SW	SSW	SSW	SW	WSW	W SW	SSW	SSW	SSW	SSW	SW
9	SSW	SSW	SSW	W	WSW	SE	ESE	ESE	E	NE	WNW	W
10	N	N	N	N	N	N	N	NE	NE	ENE	WNW	WNW
11	SE	W	NW	N	N	ESE	ESE	ESE	ESE	ESE	WSW	WNW
12	WSW	NW	NNW	NNW	N	SE	SE	SSE	SSE	WSW	WSW	W
13	SW	SW	SSW	SSW	SSW	SSW	SE	ESE	SW	SW	WSW	WSW
14	N	N	N	N	N	N	N	N	NNW	NW	WNW	WNW
15	NW	NNW	NNW	N	NNE	NNE	N	N	NNW	NW	NW	WNW
16	NW	NNW	NNW	N	N	N	N	NE	ENE	NE	ENE	W
17	WNW	WNW	WNW	NW	NW	NW	NNW	NNW	NW	NW	WNW	WNW
18	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW
19	NNW	NNW	N	N	N	ENE	ENE	E	NW	NW	NW	NW
20	NNW	NNW	N	N	N	NE	NE	ENE	N	NNW	NW	NW
21	NNW	NNW	NNW	NNW	N	N	N	NW	NW	NW	WNW	WNW
22	NW	NW	NNW	NNW	N	N	N	NE	NE	ENE	W	W
23	NNW	N	N	N	N	N	NE	NE	NE	NE	WNW	WNW
24	NW	NNW	NNW	NNW	N	N	Calm	WSW	WSW	W	W	W
25	NW	WNW	WNW	W	WNW	WNW	WNW	WSW	S	W	W	W
26	NNW	NNE	NNE	NNE	NNE	Calm	Calm	NE	ENE	W	WNW	WNW
27	NNE	NNE	NNE	Calm	NNE	WNW	NW	NW	NW	NW	NW	NW
28	NW	NNW	NW	NW	WNW	WNW	WNW	NW	WSW	W	W	W
29	WNW	NW	NNW	NNW	N	N	NW	WNW	W	WSW	W	W
30	N	NNW	NNW	N	N	N	N	SE	S	SSW	SW	SW
Mean direction.	WNW	NW	NW	NW	NW	N	ENE	E	NE	WNW	W	W

DIRECTION OF WIND 1928.

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

MARCH.

Hours.													Mean direction	Date
12—13	13—14	14—15	15—16	16—17	17—18	18—19	19—20	20—21	21—22	22—23	23—24			
WNW	WNW	NW	NW	NW	NW	NW	NW	NNW	N	N	N		NNW	1
NW	NW	N V	NW	NW	NNW	NNW	NNV	NNW	NW	NNW	NNW		NNW	2
NW	NW	NW	NW	WNW	WNW	WNW	NW	NW	NW	NW	N V		N	3
W	W	WNW	WNW	N W	NW	NNW	NW	NNW	NW	NNW	NW		NW	4
NNW	NW	N V	NW	NW	NW	NNW	NNW	NNW	N W	N	N		NNW	5
WNW	WNW	WNW	NW	NW	N V	NNW	NNW	NNW	N	N	N		NNW	6
NW	NW	NW	NW	NW	N V	NW	NNW	NNW	N W	N W	NNW		NNW	7
WNW	W W	WNW	WNW	WNW	WNW	NW	NNW	NNW	N	N	N		NW	8
NW	NW	NW	NW	NNW	NNW	NNW	NNW	NNW	N	N	N		NNW	9
NW	NNW	NW	NW	NW	NNW	NNW	NNW	NNW	NNW	NNW	NNW		NN V	10
NW	NW	N V	NW	NW	NW	NW	N V	N V	N V	NNW	NNW		NNW	11
WNW	W W	NW	NW	NW	NW	NNW	NNW	N	N	N	NNW		NNW	12
SW	WSW	WNW	W	WNW	WNW	SSW	SSW	SSW	SSW	SSW	SSW		W	13
W	W	WNW	WNW	WNW	NW	VNW	NNW	N	calm	calm	calm		W	14
WSW	W	W	WNW	WNW	NW	NNW	NNW	ENE	ENE	ESE	ESE		WNW	15
SW	WSW	WNW	W	W	WNW	W NW	WNW	NNW	ENE	ESE	ESE		SW	16
SW	SW	WSW	WSW	W	W	WNW	WNW	WNW	W	W	SSW		WSW	17
WSW	WSW	WSW	W	W	WNW	WNW	N V	NW	NNW	N	N		W	18
WNW	WNW	WNW	WNW	WNW	WNW	NW	NN	NNW	NNW	N	NW		NW	19
WNW	W NW	WNW	WNW	WNW	WNW	NW	N V	NW	NNW	NNW	NNW		NW	20
W	W	WNW	WNW	WNW	W	W	WNW	W NW	W NW	WNW	WNW		WNW	21
W	W	WNW	WNW	WNW	WNW	NW	NNW	NW	NW	NW	NW		WNW	22
SW	WSW	WNW	WNW	W	W	W	WNW	W NW	WNW	NW	NW		SW	23
NW	NW	N V	NW	NW	NW	NW	NNW	NNW	NNW	N	N W		NNW	24
NW	NW	NW	NNW	NNW	NNW	NNW	NNW	NNW	N	N W	NNW		NNW	25
WNW	W NW	WNW	WNW	WNW	WNW	WNW	W NW	W NW	NNW	NW	N W		WNW	26
NW	NW	W	W	NW	NW	NW	NN V	NNW	NNW	NNW	N W		NNW	27
WNW	WSW	WNW	WNW	WNW	WNW	WNW	W NW	W NW	NNW	NNW	NW		WNW	28
W NW	WSW	NW	N W	NW	N V	NW	N W	NNW	NNW	NNW	N		NW	29
W NW	W NW	NW	NW	NW	NW	NW	NNW	NNW	NNW	NNW	NW		NW	30
WSW	WSW	W	WNW	NW	NW	NW	NNW	NNW	N	N	N		WNW	31
WNW	WNW	WNW	WNW	NW	NW	NW	NW	NNW	NW	N	NNW		NW	Mean direction.

APRIL.

W	W	W	WNW	W	W	WNW	WNW	NW	WSW	SSW	SSE	WNW	1
WSW	SW	WSW	WSW	SW	SW	W	W SW	S NW	S SE	SSE	SSE	S	2
SSW	SSW	SW	SW	SW	WSW	W	WSW	WSW	SSW	SSW	SSW	S	3
WSW	WSW	WSW	W	WSW	W SW	WSW	SW	WSW	SE	NE	NNW	WSW	4
WNW	WNW	W NW	WNW	WNW	W NW	W NW	WNW	W	WSW	WNW	NW	NW	5
NW	NW	NW	NW	N V	NNW	NNW	NW	NW	NW	SW	SW	NW	6
SW	SW	SW	WSW	W SW	W SW	WSW	WSW	SW	SW	SW	SW	SW	7
SW	W SW	WSW	WSW	WSW	W SW	W	W W	W NW	WNW	WNW	SW	SW	8
W	W	WNW	WNW	NW	NNW	N NW	NNW	NNW	N	N	N	NW	9
W NW	W NW	W	W NW	WNW	WNW	W NW	WNW	NW	NW	N	N	WNW	10
WNW	W NW	WNW	WNW	WNW	NW	NW	NNW	NNW	N	WSW	SW	WNW	11
WN W	WNW	WNW	WN W	W	W	W	W	W	WSW	WSW	WSW	W	12
W	WNW	W N V	W NW	WNW	NW	NW	NW	NNW	NNW	NNW	NNW	WNW	13
WNW	W NW	WNW	W NW	WNW	WNW	WNW	W NW	W W	NW	NW	NW	N W	14
W NW	WNW	WNW	W NW	WNW	WNW	W NW	W NW	WNW	WNW	WNW	NW	NW	15
W	W	W	W	WNW	WNW	W NW	W NW	WNW	WN W	W	W	WNW	16
WNW	WNW	WNW	NW	NW	NW	N V	NW	NW	NW	NW	W NW	NW	17
WNW	WNW	NW	NW	NW	NW	NW	WNW	WNW	NW	NW	NW	NW	18
N V	NW	NW	W NW	W NW	NW	NW	NW	NNW	NW W	NNW	NN V	NW	19
NW	NW	NW	NW	NW	NW	N V	NW	NW	NW	NW	NW	NW	20
W NW	W NW	W NW	W NW	W NW	W NW	W NW	W NW	W NW	calm	W NW	W NW	NW	21
WNW	W NW	W NW	W NW	W NW	W NW	W NW	W NW	NW	W NW	W NW	W NW	W	22
WNW	W NW	W N V	W NW	W NW	W NW	W NW	W NW	NW	W NW	W NW	W NW	W NW	23
W N V	W NW	W NW	W NW	NW	NW	N NW	NNW	NW	N	N V	NW	NW	24
NW	NW	NW	N V	N V	NW	NW	NW	NW	N W	NW	NW	NW	25
NW	NW	N V	NW	W NW	W NW	NW	NW	NW	NW	NW	NW	NW	26
W NW	W NW	W NW	W NW	W NW	W NW	NW	W NW	W NW	SW	SW	W	W NW	27
W	W NW	W NW	W NW	W NW	W NW	W NW	N W	NW	NW	NW	NW	W NW	28
W SW	W	W	W	W NW	NW	NW	NW	NW	NW	NW	NW	W NW	29
WNW	W NW	WNW	WNW	WNW	WNW	NW	NW	NW	NW	NW	NW	WNW	Mean direction.

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

MAY.

Date.	Hours.											
	0—1	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12
1	NNW	N	NNE	NNE	Calm.	SSW	SSW	S	S	SSW	SW	WSW
2	W	NW	N	N	N	N	NNE	SE	S	SSW	SW	SW
3	NNW	NNW	NNE	NNE	N	NNE	NE	NE	NE	NE	W	WSW
4	NNW	NNW	NNE	NNE	NNE	NNE	NNE	NNW	W	WSW	W	W
5	NW	WSW	SW	SSW	SSW	SSE	SSE	SSE	S	SSW	SW	SW
6	NW	NNW	NW	SSW	S	S	S	S	SSW	SSW	SW	SW
7	NW	NW	NW	W	WNW	WNW	WSW	SSW	SSW	SW	SW	SW
8	NW	NW	W W	NW	NW	NW	NW	W	WSW	SW	SW	SW
9	NW	W W	W	WNW	W	WNW	WSW	W	SW	WSW	W	WNW
10	WNW	NW	NW	NW	NNW	NNW	NW	NNE	ENE	W	WSW	SW
11	WNW	NW	WNW	W	W	W	SW	WSW	SSW	SSW	SSW	SSW
12	SW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SW	SW
13	SW	WSW	SW	SW	SW	SSW	SSW	SSW	SSW	SSW	SSW	SW
14	W	W	W	W	W	W	WSW	WSW	WSW	SW	SW	SW
15	WSW	WSW	WSW	WSW	WSW	SW	WSW	WSW	SW	SW	WSW	WSW
16	WSW	WSW	W	WSW	WSW	WSW	WSW	WSW	SW	SW	WSW	WSW
17	W	WNW	WNW	WNW	NW	NW	W	W	W	W	W	W
18	WNW	WNW	WNW	WNW	WNW	WNW	W W	ESE	ESE	WNW	WNW	W W
19	WNW	WNW	NW	NW	WNW	NW	NNW	NW	NNW	NNW	NW	NW
20	NNW	NNW	NNW	N	N	NNE	NNE	NE	NE	NNW	W	NW
21	N W	NW	N	N	NNE	NNE	NNE	NNE	NE	WNW	WNW	WNW
22	NNW	N W	N	N	N	N	NE	NNE	NNW	NW	NW	NW
23	NW	NW	NNW	NNW	N	Calm.	NNE	WNW	WSW	WSW	SW	SW
24	WSW	WSW	W-W	WSW	WSW	SW	WSW	SW	SW	SW	SW	SW
25	WSW	WSW	W	W	WSW	WSW	WSW	WSW	SW	SW	SW	WSW
26	W	W	WNW	W	WNW	WNW	W W	W	WNW	W	W	W
27	W	W	W	WSW	W	W	W	WNW	WNW	WNW	WNW	WNW
28	W	WNW	WNW	NW	NW	NW	WNW	WNW	WNW	WNW	W W	WNW
29	WNW	WNW	WNW	WNW	W	W	W	W	WSW	WSW	WSW	W
30	W	W	W	WNW	W	W	W	WSW	WSW	W	WNW	WNW
31	W	W	W	W	WNW	WNW	W W	WNW	W W	WNW	WNW	WNW
Mean direction.	WNW	WNW	WNW	WNW	WNW	W	WSW	SW	WSW	WSW	W	W

JUNE.

1	WNW	W	W	WNW	WNW	NW	WNW	WNW	NW	NW	WNW	WNW
2	WSW	WSW	WNW	WNW	W W	W	WSW	W	W	W	W	W
3	SW	SW	W	W	WSW	WSW	WSW	SW	WSW	WSW	W	W
4	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	SW	SSW	SW
5	NW	WNW	WNW	W W	WNW	WNW	NW	NW	NW	NNW	NW	WNW
6	WSW	WSW	WSW	SW	calm	SW	SSW	S	S	S	SSW	SW
7	WNW	WNW	NW	NW	NNW	N W	NNW	NW	WNW	WNW	WNW	WNW
8	NW	NW	N W	W	NNW	NW	N W	W	NW	NNW	WNW	WNW
9	WNW	WNW	W W	WNW	WNW	WNW	WNW	WNW	W	WNW	W	W
10	W	W	W	W	SSE	NNE	Variable	SE	S	S	SSE	SSE
11	SSE	SSE	SSE	SSE	SSE	N	NNE	N	NNE	S	SW	SE
12	WSW	S S	WNW	WNW	N	NNE	ENE	ENE	NW	WNW	WNW	WNW
13	SSW	S	W	W	N	NW	NNW	N	calm	NNW	N	N
14	SSE	W	WNW	NW	NW	W W	WNW	WNW	W W	W	W	W
15	WSW	WSW	WSW	W	W	W	WSW	WSW	WSW	WSW	WSW	WSW
16	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW
17	W	W	W	W	W	W	W	W	W	WSW	W	W
18	W	W	WNW	WNW	W	W	WNW	WSW	WSW	W	W	W
19	WNW	WNW	WNW	WNW	W W	WNW	W	W W	WSW	SW	SW	SW
20	SSE	WNW	WNW	WNW	W W	WNW	WNW	WNW	ENE	N	SW	N
21	S	S	SSE	S E	S	SSE	S-E	SE	S	S	S	SSW
22	S	S	SSE	SE	SSE	SE	NW	SSE	S E	SSW	S	S
23	SW	S	WSW	WSW	WSW	SW	SSW	W	WSW	WSW	WNW	W
24	WSW	W	WSW	W	W	W	W	S W	SSW	SSW	S-W	WSW
25	WSW	W	W	W	WSW	WSW	W	WSW	W W	WSW	SW	WNW
26	WNW	SSE	SSE	SSE	SE	SE	SE	SE	SE	ESE	S.	WNW
27	W	WNW	WNW	WNW	WNW	WNW	WNW	WNW	W NW	WNW	WNW	WNW
28	W W	W NW	W NW	W NW	WNW	WNW	N W	NE	NE	NNW	NNW	N W
29	W W	WNW	WNW	WNW	NW	NW	NW	NW	NW	W	NW	NNW
30	ESE	SE	SE	N	N	ESE	SE	S	SSE	S-E	S	SSW
Mean direction	WSW	WSW	W	W	WNW	W	W	W	WSW	WSW	WSW	W

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

MAY.

Hours.													Mean direction.	Date.
12—13	13—14	14—15	15—16	16—17	17—18	18—19	19—20	20—21	21—22	22—23	23—24			
WSW	WSW	WSW	WNW	W.W	W.W	WSW	W	WNW	WNW	NW	NW		WSW	1
SW	SW	SW	SW	WSW	WSW	W	W	WNW	NW	NW	NNW		WSW	2
WNW	WNW	WNW	WNW	WNW	WNW	NW	NW	NW	NW	NNW	NNW		NW	3
W	W	W	W	W.W	WNW	W W	W.W	NW	NW	NW	N. W		WNW	4
W W	WSW	WSW	W.W	WSW	W.W	WNW	WNW	WNW	NW	.W	NW		SW	5
W W	WNW	W.W	W.W	WSW	W.W	W.W	W.W	WSW	WNW	W W	W W		SW	6
W.W	W	W	WNW	W	W	WNW	WNW	WSW	NW	NW	W		W	7
SW	SW	W W	W.W	WSW	W	W	W.W	W.W	WNW	WNW	W W		W	8
WNW	WNW	WNW	WNW	W	W	WNW	W.W	WNW	W.W	W.W	W	W	WNW	9
W.W	W	W	W	W	W	WNW	WNW	W.W	W.W	WNW	W		W	10
SSW	SW	SW	SW	SW	SW	W	SW	SW	SW	SW	SSW		SW	11
W.W	WSW	W.W	W.W	W W	WSW	W W	W.W	W.W	WSW	SW	SW		SW	12
SW	WSW	SW	SW	SW	W	W.W	W.W	WSW	W	W	WSW		SW	13
SW	WSW	SW	SW	SW	WSW	W.W	W.W	W.W	W.W	WSW	W.W		WSW	14
WSW	WSW	W.W	W.W	W.W	W.W	W.W	W	W	W.W	W.W	W		W.W	15
WSW	WSW	W.W	W	WNW	W.W	W.W	WNW	WNW	WNW	W	W		W	16
W	W	WNW	W.W	W.W	WNW	W W	WNW	WNW	NW	NW	W.W		WNW	17
W.NW	WNW	WNW	W.W	W W	W.W	WNW	NW	NW	NNW	WNW	WNW		WNW	18
WNW	NW	NW	NW	NW	NW	NW	NW	W.W	NW	NNW	N.W		NW	19
NW	NW	NW	NW	NW	NNW	N W	NNW	N.W	N.W	N.W	N.W		N.W	20
W	WNW	WNW	W.NW	W.W	W W	NW	NW	NW	NW	NW	N.W		NW	21
NW	NW	WNW	W.W	W W	WNW	W.NW	WNW	NW	NW	NNW	NNW		NW	22
SW	SW	SW	SW	SW	SW	SW	W.W	W.W	W.W	WSW	WSW		W.W	23
SW	WSW	W.W	W.W	W.W	W.W	WSW	WSW	WSW	W.W	W	W		WSW	24
WSW	W.W	W.W	W.W	W.W	W.W	W	W	W	WSW	W	W		WSW	25
W	W	W	W	W	W	W	W	W	WSW	WSW	WSW		W	26
W.NW	WNW	WNW	W.W	W.W	W.W	W.NW	W.NW	W.W	W	W	W		W.W	27
WNW	WNW	WNW	W.W	W.W	W W	W.W	WNW	WNW	WNW	WNW	W.NW		W.W	28
WNW	WNW	WNW	W.W	W.W	WNW	WNW	W.W	W.NW	WNW	W	W		WNW	29
WNW	WNW	WNW	W.W	W	WNW	W	W	W	W	W	W		W	30
WNW	WNW	WNW	WNW	WNW	WNW	WNW	W.W	W.NW	WNW	WNW	WNW		W.NW	31
W	W	W	W	W	W	WNW	WNW	WNW	WNW	W.NW	WNW		W	Mean direction

JUNE.

WNW	W.W	WNW	WNW	WNW	WNW	NW	NW	WNW	WNW	W	W	WNW	1
W	W	W	W.W	WNW	WNW	W.W	WNW	W	WNW	W	WSW	W	2
W.W	W.W	WNW	W	WSW	W.W	WSW	WSW	WSW	WSW	WSW	WSW	W	3
WSW	W	W	WNW	W.W	W	W.W	WNW	WNW	WNW	NW	NW	W	4
WNW	WNW	WNW	W.W	W.W	W	W	W	W	W	W	W.W	WNW	5
WSW	W	W	W	W	W	W	W	W	WNW	W.W	WSW	W	6
W	W	W	W	W	W	W.NW	W.W	W.NW	WNW	W.NW	W.NW	WNW	7
WNW	WNW	W	W	W	W	W	W.NW	W.W	W	W	W.W	W.W	8
W	W	WSW	WSW	WSW	WSW	WSW	W.W	WSW	WSW	W	WSW	W	9
SW	SW	SW	SW	SSW	SW	SW	SW	variable	SSE	SSW	SSE	SSW	10
WSW	SW	WSW	WSW	W	W.W	W.NW	W.NW	W.NW	W.NW	W.NW	W.NW	WSW	11
WNW	N.W	NW	N.NW	NNW	NW	W.NW	WSW	WSW	Calm	SW	SW	NW	12
NW	NNW	N	NW	NW	WSW	NW	W.SW	SSW	SSW	SSE	S	W.NW	13
W	WSW	WSW	WSW	WSW	WSW	W.NW	WSW	W	W	W	WSW	W	14
WSW	WSW	WSW	WSW	WSW	WSW	W.W	WSW	W.SW	WSW	W.NW	W.SW	W.SW	15
W.SW	WSW	W.SW	WSW	W	W.SW	W	W	W	W	W	W	WSW	16
W	W	W	W	W	W	W	W.NW	W	W	W	W	W	17
W	W	W	W	W.SW	W.SW	W.SW	W	W	W	W	W.NW	W	18
WSW	WSW	WSW	WSW	W.W	W.SW	SW	S.W	SW	S.SE	S	S.SE	W.W	19
S.W.	S.W	SW	S.SW	SW	SW	W	W.SW	S.SW	S	SW	S.SE	WSW	20
NW	S.W	SW	S.SW	SW	SW	S.W	SW	S.W	S.W	S.W	S	S	21
S	S	S.SW	S.W	S	SW	SW	S.SW	S.W	S.W	S.W	S	S	22
W	W	W	W	W	W	W	W	W.SW	W.W	W.SW	W	W.SW	23
W.W	W	W	W.SW	W	W	W	S.W	W	W	W	W.SW	W.SW	24
S	W.W	W.W	S	W.SW	S	S	W.SW	W.W	W.NW	W.NW	W.NW	W.SW	25
W.NW	W.NW	W.W	W.W	W	W	W.W	W.NW	W.NW	W.NW	W.NW	W	W.SW	26
W.W	W.W	W.W	W.W	W.W	W.W	W.W	W.NW	W.NW	W.NW	W	W	W.NW	27
W.W	N.W	N.W	N.W	N.W	N W	N.NW	N.W	N.NW	N.W	W.NW	W.NW	N.W	28
W.W	N.W	W.W	W.W	W.W	W.W	N.NW	W	N.W	E	E.NE	E	N.W	29
NNE	N.NE	N.E	N.E	N.E	S.SW	S	S	S	S	W	W	S.E	30
W	W	W	W	W	W	W	W	W	W.SW	W	W.SW	W	Mean direction

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

JULY.

Date.	Hours.											
	0—1	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12
1	W	W	W	W	W	W	W	W	W	WSW	WSW	WSW
2	WSW	WSW	WSW	WSW	WSW	WSW	W	WSW	W	WSW	WNW	WNW
3	NW	N	NW	N	NW	N	N	W	WNW	WNW	NW	NW
4	SE	WNW	NW	NW	NNW	N	NW	W	W	WNW	W	WNW
5	WNW	W	WSW	SW	SW	W	W	W	WSW	WSW	W	W
6	W	W	W	W	WSW	WSW	WSW	WSW	WSW	SW	SW	SW
7	WSW	WSW	WSW	WSW	WSW	WSW	WSW	SW	SW	SW	SW	WSW
8	W	W	W	WSW	W	NW	WSW	WSW	W	WSW	WSW	WSW
9	SW	SW	SW	WSW	WNW	WSW	WSW	SW	SW	SW	SW	SW
10	SW	S	SSE	SSE	SSE	SSE	S	SSW	SSW	WSW	SSW	SW
11	SW	SW	SSE	SSE	SSE	SE	SSE	SSE	SSE	SSW	SW	WSW
12	W	W	W	W	SW	SW	SSE	SSE	ENE	WNW	NW	N
13	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	W	W	WNW
14	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	W	W	W	W
15	W	W	WNW	W	WNW	W	WNW	W	WNW	W	WNW	WNW
16	W	W	W	W	W	W	W	W	W	WSW	W	WSW
17	WSW	WSW	WSW	WSW	WSW	WSW	W	WSW	SW	SW	SW	SW
18	SW	SW	SSW	SW	SW	SSW	SSW	SSW	SW	SW	SW	SSW
19	WSW	W	W	W	WNW	WNW	WNW	WNW	WNW	WSW	WNW	W
20	WSW	W	WNW	W	W	W	W	W	W	W	W	W
21	WSW	WSW	WSW	WSW	WSW	WSW	SW	WSW	WSW	WSW	WSW	WSW
22	WSW	WSW	WSW	WSW	WSW	WSW	SW	WSW	WSW	WSW	SW	NW
23	WSW	WSW	WSW	WSW	WSW	WSW	WSW	SW	SW	WSW	WSW	WSW
24	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW
25	WSW	W	W	WSW	WSW	WSW	WSW	WSW	W	W	W	WSW
26	WSW	WSW	WSW	WSW	WSW	WSW	SW	WSW	WSW	W	WSW	W
27	WSW	WSW	WSW	WSW	W	WSW	W	W	W	W	W	W
28	WNW	W	W	W	W	W	W	W	W	W	WSW	WSW
29	W	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW
30	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	SW	SW
31	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW
Mean dir.ction.	W	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	W	W

AUGUST.

1	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW
2	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW
3	WSW	WSW	WSW	WSW	WSW	W	W	W	W	W	W	WSW
4	W	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW
5	WSW	WSW	W	W	WSW	WSW	W	WSW	WSW	WSW	WSW	WSW
6	SW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW
7	SW	SW	SW	SW	SW	SW	WSW	WSW	SW	SW	WSW	WSW
8	SW	SW	SW	SW	SW	SW	SW	SW	SW	SSW	SW	SW
9	SW	SW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW
10	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	SW	WSW	WSW
11	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW
12	WSW	WSW	WSW	WSW	W	W	W	W	WNW	W	WSW	WSW
13	SW	WSW	WSW	WSW	WSW	W	WNW	W	WSW	WSW	WSW	WSW
14	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW
15	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	W	W
16	WSW	WSW	W	WNW	WNW	W	W	WNW	WNW	WNW	WNW	WNW
17	WSW	WSW	W	W	W	W	NE	WNW	WNW	WNW	WNW	WNW
18	WSW	WSW	WSW	WSW	WSW	W	W	W	WNW	WNW	W	W
19	WSW	SW	SW	WSW	WSW	SW	SW	SW	SW	SW	SW	WSW
20	WSW	WSW	WSW	WSW	WSW	WSW	W	W	W	W	WSW	WSW
21	WSW	W	WSW	W	NW	W	W	WNW	WNW	W	W	W
22	W	W	W	WSW	WSW	W	WSW	WSW	WSW	WSW	WSW	WSW
23	W	WSW	WSW	WSW	WSW	WSW	W	W	WSW	WSW	WSW	W
24	WSW	WSW	WSW	WSW	W	W	W	W	W	WNW	WNW	WNW
25	WSW	WSW	WSW	WSW	WSW	W	W	W	W	W	W	W
26	WNW	WNW	NW	NW	NNW	NW	NW	W	W	W	W	WNW
27	WSW	W	WNW	W	WNW	WNW	W	WNW	NNW	WNW	WNW	WNW
28	WNW	WNW	WNW	W	W	W	WNW	WNW	W	W	W	W
29	WNW	WNW	W	W	W	W	W	W	WNW	WNW	WNW	W
30	W	W	W	WNW	W	W	WSW	WSW	WSW	WSW	W	W
31	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW
Mean direction.	WSW	WSW	WSW	WSW	W	W	W	W	W	W	W	W

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

JULY.

Hours.												Mean direction.	Date.
12—13	13—14	14—15	15—16	16—17	17—18	18—19	19—20	20—21	21—22	22—23	23—24		
WSW	WSW	W	WSW	WSW	WSW	WSW	NW	WSW	WSW	WSW	WSW	WSW	1
WNW	W	W	WSW	WSW	WSW	WSW	W	WNW	WNW	WNW	WNW	W	2
NNW	NNW	NW	W	SW	SSW	SSW	SW	NW	SSE	S	SE	NW	3
WNW	WNW	WNW	WNW	W	W	WNW	WNW	WNW	WNW	W	NW	WNW	4
W	W	NW	NW	W	W	W	W	W	W	W	W	W	5
SW	SW	SW	SW	WSW	WSW	WSW	WSW	WSW	WSW	SW	SW	WSW	6
WSW	WSW	WSW	WSW	W	W	W	W	W	WSW	W	W	WSW	7
W	W	WSW	W	WSW	WSW	WSW	WSW	WSW	SW	SW	SW	WSW	8
WSW	WSW	WSW	SW	WSW	WSW	WSW	SSW	SW	SW	SW	SW	SW	9
SSW	SW	SW	SW	WSW	WSW	WSW	WSW	SW	SSW	S	SW	SSW	10
SW	WSW	W	W	WSW	W	W	W	W	WSW	W	WSW	SW	11
SE	ESE	ENE	NE	ENE	E	ESE	SE	SE	SE	SE	S	SE	12
WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	W	13
WNW	WNW	WNW	W	W	W	WNW	W	WNW	WNW	W	WNW	WNW	14
WNW	WNW	WNW	WNW	W	W	W	W	W	W	W	W	W	15
WSW	WSW	WSW	WSW	WSW	WSW	W	W	W	WSW	WSW	WSW	W	16
SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SSW	SW	SW	17
SW	SW	SW	SW	WSW	WSW	WSW	WSW	SW	SW	SW	SW	SW	18
W	WSW	WSW	WSW	W	WSW	W	W	W	WSW	W	W	W	19
W	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WNW	W	WSW	W	20
WSW	WSW	WSW	SW	W	W	WSW	WSW	SW	SW	SW	SW	WSW	21
SW	SW	SW	SW	SW	SW	SW	WSW	SW	SW	SW	WSW	SW	22
WSW	WSW	WSW	WSW	WSW	SW	WSW	WNW	WSW	WSW	WSW	WSW	WSW	23
WSW	SW	SW	WSW	WSW	WSW	WSW	WSW	W	W	WSW	WSW	WSW	24
WSW	WSW	WSW	WSW	W	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	25
W	W	W	W	WSW	W	W	W	W	W	W	W	W	26
WNW	WNW	W	W	WNW	W	W	W	W	W	W	W	W	27
WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	W	28
SW	SW	WSW	WSW	WSW	SW	WSW	SW	WSW	WSW	WSW	WSW	WSW	29
SW	SW	SW	WSW	WSW	WSW	WNW	WSW	WSW	WSW	WSW	WSW	WSW	30
WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	31
W	WSW	W	WSW	WSW	WSW	WSW	WSW	W	WSW	WSW	WSW	WSW	Mean direction

AUGUST.

W	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	1
WSW	W	W	W	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	2
WSW	W	WSW	WSW	WSW	WSW	W	W	WSW	WSW	WSW	WSW	WSW	3
WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	4
WSW	WSW	WSW	WSW	WSW	SW	SW	SW	SSW	SW	SW	SW	WSW	5
WSW	WSW	SW	SW	SW	SW	SW	SW	SW	SSW	SSW	SSW	SW	6
WSW	WSW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	7
SW	SW	SW	SW	SSW	SSW	SW	SW	SSW	SSW	SSW	SSW	SW	8
WSW	WSW	WSW	W	W	W	WSW	WSW	WSW	SW	SW	SW	WSW	9
WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	SW	WSW	WSW	SW	WSW	10
WSW	WSW	WSW	WSW	WSW	W	WSW	WSW	WSW	WSW	WSW	WSW	WSW	11
WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	12
WSW	WSW	WSW	WSW	WSW	WSW	WSW	SW	SW	SW	WSW	WSW	WSW	13
WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	14
WSW	WSW	WSW	WSW	W	W	W	W	W	W	W	WSW	WSW	15
W	W	W	WNW	WNW	WNW	WNW	WNW	W	WSW	WSW	WSW	W	16
WNW	W	WNW	WNW	W	W	W	W	WSW	WSW	WSW	WSW	W	17
W	W	W	W	WNW	W	WNW	W	WSW	W	WSW	WSW	W	18
WSW	WSW	WSW	W	W	W	W	WNW	WNW	WNW	W	WSW	WSW	19
WSW	WSW	W	W	WNW	WNW	WNW	WNW	WNW	WNW	WNW	W	W	20
W	W	W	WNW	W	WNW	WNW	W	WNW	W	W	W	W	21
W	W	W	W	WSW	WSW	WSW	WSW	W	WSW	W	W	W	22
WSW	WSW	WSW	WSW	WSW	WSW	WSW	W	WSW	WSW	WSW	WSW	WSW	23
WNW	WNW	W	WNW	WNW	WNW	WNW	W	W	WSW	WSW	WSW	W	24
W	WNW	WNW	WNW	WNW	WNW	WNW	W	WNW	WNW	WNW	WNW	W	25
WNW	WNW	WNW	WNW	WNW	W	WNW	W	W	W	W	WSW	WNW	26
WSW	WNW	WNW	WNW	WNW	WNW	W	W	WNW	WNW	WNW	WNW	WNW	27
WNW	W	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	28
WNW	W	WNW	WNW	WNW	WNW	WNW	WNW	W	W	W	W	WNW	29
WSW	WSW	WSW	WSW	WSW	W	W	WSW	WSW	W	W	WSW	W	30
WSW	WSW	WSW	W	SW	SW	SW	SW	SW	SW	SSW	SSE	WSW	31
W	W	W	W	W	W	W	W	W	WSW	WSW	WSW	W	Mean direction.

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

SEPTEMBER.

Date.	Hours.											
	0—1	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12
1	SSE	SSE	WNW	W	WSW	WSW	WSW	WSW	WSW	WSW	W	W
2	WSW	WSW	SW	SW	SW	SW	SSE	SSE	S	S	SW	WSW
3	WSW	WSW	SW	WSW	WSW	WSW	W	WNW	WNW	W	W	W
4	WSW	SW	WSW	WSW	WSW	SW	WSW	WSW	WSW	W	W	W
5	W	WNW	WNW	WSW	ESE	ESE	SE	SE	W	W	NNW	WNW
6	W	WSW	WSW	WSW	WSW	SW	SW	SE	SE	S	SSW	SW
7	W	W	WSW	WSW	W	W	WSW	WSW	WSW	WSW	WSW	WSW
8	W	W	W	WSW	W	WSW	WSW	WSW	WSW	WSW	W	WNW
9	SW	W	WSW	SW	SW	WSW	WSW	SW	WSW	WSW	WSW	WSW
10	S	SE	SE	SSE	SSE	SSE	SSE	S	WSW	SW	SW	SW
11	NW	calm	SE	ESE	ESE	SSW	S	S	WSW	WSW	W	W
12	WSW	WSW	SW	SW	SW	WSW	SE	E	N	N	SSE	NNW
13	S	S	S	ESE	SE	ENE	SE	WNW	WNW	N	N	NE
14	WNW	NW	WNW	NW	NNE	ENE	ESE	SSE	NE	NE	NE	WNW
15	NW	WNW	E	SE	ESE	N	N	N	N	E	WSW	WSW
16	ESE	ESE	ESE	SE	ESE	ESE	ESE	ESE	E	ENE	E	ESE
17	ESE	ESE	ESE	SE	SE	SE	SW	ESE	ESE	WNW	WSW	NW
18	S	SSW	NW	N	N	ESE	ESE	ESE	ESE	NNW	NW	WNW
19	WNW	WNW	W	NW	NW	NNW	NW	NW	WNW	WNW	WNW	NW
20	SW	W	W	WSW	WSW	SW	SSW	W	WSW	WSW	W	W
21	SSW	SW	WSW	WSW	SSW	S	WNW	WSW	WSW	W	WSW	WSW
22	SSW	SSE	SSE	SSE	SSW	SSW	SSE	SSE	SSE	SSE	S	SSE
23	N	E	ESE	ESE	SE	SSE	SSE	SSE	S	SW	W	SSW
24	S	S	ESE	ESE	ESE	ESE	SE	SE	SE	SSE	S	S
25	S	SSE	SSE	SSE	SSE	SSE	SSE	SSE	S	S	S	W
26	SE	ESE	SE	ESE	ESE	ESE	ESE	ESE	ESE	WNW	WNW	WNW
27	NW	NNW	N	N	N	N	NE	NE	NE	NE	NNW	NW
28	NNW	NNW	NW	NNW	N	NNE	N	NNW	NNW	NNW	NW	NW
29	NW	NW	NW	NW	NW	NW	NNW	NNW	NNW	NE	WNW	WNW
30	NNW	ESE	ESE	ESE	ESE	ESE	S	S	S	S	SSE	S
Mean direction.	WSW	WSW	SW	SSW	S	SSW	SSW	SSW	SSW	WSW	WSW	W

OCTOBER.

1	WNW	WNW	WNW	WNW	W	calm	SSW	SSW	W	WSW	W	WSW
2	S	SSW	WSW	WSW	W	WNW	W	NW	NNE	NNE	ENE	E
3	SSE	S	SE	ESE	ESE	ESE	SE	NNW	SSE	SSE	SE	SSE
4	SSE	SSE	SSE	SSE	SSE	ESE	SE	ESE	ESE	ESE	ESE	SE
5	SE	SE	SE	SE	SE	SE	SE	ESE	SE	SE	S	SSW
6	SE	SE	SSE	SSE	SSE	SE	ESE	SSE	SSE	SSE	SSW	SSW
7	SE	SE	SE	SE	SE	SE	SE	ESE	ESE	SE	S	SW
8	NNE	NE	NE	NE	NE	NE	NE	NE	NE	NE	ENE	WNW
9	N	N	N	NNW	N	N	N	NNE	ENE	ENE	NE	NE
10	NNW	NNW	N	N	N	N	N	NE	NE	ENE	ENE	WNW
11	NNW	NNW	NNW	NNW	NNW	N	N	NE	NE	NE	NE	WNW
12	N	N	N	N	N	N	NE	NE	NE	NE	NW	WNW
13	NNW	N	NNW	N	N	N	N	N	NNW	NW	NW	WNW
14	NNW	N	N	N	N	N	NNE	ENE	ENE	ENE	ENE	W
15	NNW	N	N	N	N	N	N	ENE	ENE	ENE	NW	NW
16	N	N	N	ENE	ENE	ENE	ENE	ENE	NE	NE	NE	ENE
17	N	N	N	ENE	NE	NNE	N	ENE	E	E	SSW	SSW
18	NE	NE	NNE	NNE	NE	NNE	NNE	NE	NE	NE	WNW	WNW
19	ESE	ESE	S	SSE	SSE	SSE	ESE	SE	ESE	ENE	ENE	WNW
20	ENE	N	NNE	NNE	NNE	NE	NE	NE	NE	NE	NE	NNE
21	NNW	N	N	ENE	NNW	N	NE	ENE	NE	NE	NE	N
22	NNE	NNE	NE	N	NNE	NE	NE	ENE	ENE	NE	NE	WNW
23	NNE	NE	NNE	NNE	NE	NE	NE	NE	E	S	S	S
24	E	SSE	SSW	S	S	SSE	SSE	ENE	ESE	ESE	SSW	SSW
25	ESE	E	E	ESE	ESE	ESE	SE	SE	SE	S	SSW	SSW
26	S	SE	ESE	SE	SE	WNW	ENE	NE	NE	ENE	ESE	ESE
27	NE	NE	NE	NE	NE	NNE	NNE	NE	NE	NE	NE	NW
28	N	N	N	N	N	NNE	NNE	N	N	NE	ENE	NW
29	N	NNE	N	N	N	N	N	N	NNE	NE	NNW	NNW
30	N	N	N	N	N	N	N	N	N	NE	ENE	NNW
31	N	N	N	N	N	N	NNE	NE	NE	NE	ENE	WNW
Mean direction.	ENE	NE	NE	ENE	NE	NE	ENE	ENE	ENE	ENE	E	WSW

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

SEPTEMBER.

Hours.												Mean direction.	Date.
12—13	13—14	14—15	15—16	16—17	17—18	18—19	19—20	20—21	21—22	22—23	23—24		
W	W	W	WSW	W	W	W	WSW	WSW	WSW	WSW	WSW	W	1
WSW	W	W	WNW	W	W	W	W	WNW	W	W	WNW	W	2
W	W	W	W	W	W	W	WNW	W	WSW	WSW	WSW	W	3
W	W	WNW	WNW	W	W	W	W	W	W	W	W	W	4
WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	W	5
WSW	WSW	WSW	W	W	WNW	WNW	WNW	WNW	WNW	W	W	W	6
WSW	W	W	W	WNW	NW	NW	NW	WNW	WNW	W	W	W	7
WNW	WNW	W	WNW	WNW	WSW	WNW	W	WNW	SW	WSW	WSW	W	8
WSW	W	W	W	W	W	W	WSW	WNW	N	N	WSW	W	9
WSW	WSW	W	WNW	WNW	WNW	WNW	NW	NNW	NNW	NNW	NNW	W	10
W	W	W	W	W	W	W	WNW	W	WSW	WSW	WSW	WSW	11
WNW	WNW	WNW	WNW	NW	NW	NNW	NNW	calm	calm	calm	S	WNW	12
ENE	W	WNW	WNW	WNW	NNW	NW	NW	NNW	NNW	NW	WNW	WNW	13
WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	14
W	WSW	W	W	WNW	WNW	NW	NW	NW	NNW	N	ESE	NNW	15
ESE	ESE	ESE	W	W	WNW	NW	NW	WNW	N	N	N	SW	16
NW	WNW	NW	WNW	NE	NE	NE	NE	ESE	ESE	SSE	S	W	17
WNW	NNW	NNW	NNW	NNW	NW	NW	NW	NW	WNW	NW	WNW	N	18
WNW	WNW	WNW	NW	WNW	NW	NNW	NNW	NNW	NNW	calm	SW	N	19
W	WNW	W	W	W	W	WSW	WSW	W	W	S	S	SSE	20
WSW	WSW	WSW	SW	WSW	WSW	WSW	WSW	SSW	S	SSW	SSW	SSE	21
SW	SW	SW	SW	WSW	W	W	WNW	NW	NW	NW	N	SSE	22
W	SSE	SSE	NW	Calm	Calm	SSE	SE	ESE	SE	SE	SSE	SSW	23
S	SSW	SSW	SSW	SW	SSW	SSW	SSW	SSW	S	S	S	S	24
W	W	WNW	WNW	SW	NNW	NW	calm	calm	SSW	SSE	SSE	SSW	25
WNW	WNW	WNW	WNW	WNW	NW	NW	NW	NW	NW	NW	NNW	NW	26
WNW	WNW	WNW	NW	NW	NW	NW	NW	NNW	NNW	NNW	NNW	NW	27
NW	NW	NW	NW	NW	NW	NW	NW	NW	NNW	NNW	NNW	N	28
NW	NNW	WNW	WNW	NW	NW	NW	NNW	NNW	NNW	NW	NNW	N	29
SSW	W	W	W	W	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WSW	30
W	W	WNW	WNW	WNW	WNW	WNW	WNW	NW	WNW	WNW	W	NW	Mean direction.

OCTOBER.

WSW	WSW	W	W	WNW	W	W	WSW	WSW	WNW	WNW	WSW	W	1
SSE	SW	Variable	NE	E	SE	SE	SE	SSE	SSE	SSE	SSE	ESE	2
WSW	SSW	SSW	SSW	SSW	S	S	SSE	SSE	SE	SE	SSE	SSE	3
S	SSE	SE	S	S	S	S	S	SSE	SE	SE	SE	SSE	4
SSW	SSW	SSW	SSW	SSW	SSW	SSW	S	SSE	SE	SE	SSE	SSE	5
SSW	SSW	SSW	SW	WSW	WSW	WSW	calm	SW	SSW	SE	SE	SSE	6
W	WNW	WNW	WNW	NW	NNW	NW	N	NNW	N	NNE	NE	NW	7
WNW	NW	NW	NW	NW	NW	NW	NW	NNW	NNW	N	N	NNW	8
WNW	WNW	NW	NW	NW	NW	NNW	NNW	NNW	N	N	N	NNW	9
WNW	NW	NW	NW	NNW	NNW	NNW	NNW	N	N	NNW	N	NNW	10
NW	NW	NW	NW	NW	NW	NW	NNW	N	NNW	NNW	NNW	NNW	11
WNW	NW	NW	NW	NNW	NNW	NW	NNW	NNW	NNW	NNW	NNW	NNW	12
WNW	NW	NW	NW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	13
WNW	WNW	NW	NW	NW	NNW	NNW	N	N	NNW	NNW	NNW	NNW	14
NW	NW	NW	NW	NW	NW	NW	NNW	NNW	NNW	NNW	N	NNW	15
W	WNW	WNW	WNW	NW	NW	NNW	NNW	N	N	N	N	N	16
SSW	SSW	SW	SW	SW	SW	SW	SSE	ESE	E	ESE	ESE	ESE	17
WNW	WNW	WNW	WNW	WNW	NW	NNW	NNW	NW	NNW	NNW	NNW	NNW	18
WNW	NW	NW	NW	NW	WSW	ENE	N	NNE	NNE	NE	NE	N	19
WNW	WNW	NW	NW	NNW	NNW	NNW	WNW	NNW	NNW	N	N	N	20
N	N	NW	NNW	NNW	NNW	NNW	NNW	N	NNE	NNE	NNE	N	21
WNW	NW	NW	NW	NW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	N	22
SSE	SE	SE	WNW	NW	NW	NNW	NNW	NNW	NNW	NNW	NNW	NNE	23
SSW	SSW	SSW	SSW	SSW	SSW	SSE	SSE	SSE	SSE	SE	ESE	SSE	24
WSW	WSW	WSW	WSW	WSW	W	W	WSW	WSW	W	WSW	SSE	SSE	25
ESE	ESE	SSE	SW	WSW	W	WNW	WNW	WNW	WNW	NW	NNE	ESE	26
WNW	WNW	WNW	WNW	NW	NW	NW	NNW	NNW	NNW	N	N	NNW	27
NW	NW	NW	NW	NW	NW	NNW	NNW	NNW	NNW	NNW	N	NNW	28
NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	N	N	NNW	NNW	29
NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	N	N	N	NNW	30
NW	NW	NW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	N	N	31
W	WNW	WNW	WNW	NW	NW	NW	NNW	NNW	N	NNE	NNE	NNW	Mean direction.

NOVEMBER. (Averages for periods of sixty minutes from full hour to full hour of local mean time.)

Date.	Hours.											
	0—1	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12
1	ESE	ESE	ESE	N	N	N	N	NE	NE	NE	NE	NNE
2	N	E	ENE	NE	NE	NE	NE	NE	NE	NE	ENE	NE
3	ENE	ENE	E	E	ENE	ENE	ENE	N	NE	NE	ENE	WNW
4	E	ESE	ESE	E	ESE	NE	NE	NE	ENE	NE	NE	NE
5	ENE	ESE	ESE	NE	NE	NE	NE	NE	ENE	ENE	NE	E
6	E	NE	NE	NE	NE	NE	ENE	ENE	ENE	NE	NE	NE
7	ENE	ENE	ENE	ENE	ENE	ENE	ENE	E	E	ENE	ENE	ENE
8	ESE	ESE	ESE	NNE	NE	NE	NE	ENE	NE	NE	NE	NE
9	N	ESE	ESE	ESE	ENE	NE	NE	NE	ENE	SE	SE	SE
10	NNE	ESE	E	NE	NE	NE	ENE	NE	NE	NE	NE	NE
11	N	E	E	ESE	NE	NE	NE	NE	ESE	ENE	ENE	ENE
12	ENE	ENE	ENE	ENE	NE	NNE	ENE	ENE	NE	NE	NNE	NE
13	N	N	ENE	NE	NE	ESE	ENE	ENE	E	E	ESE	E
14	N	N	N	N	NNE	N	NNE	NNE	NNE	N	NE	ENE
15	NE	NE	NE	N	NNW	NNW	N	N	N	NE	NE	ENE
16	N	E	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	E	E
17	NE	NE	NE	NE	ENE	NE	NE	NE	NE	ENE	ENE	ENE
18	N	ENE	ENE	ENE	ENE	NE	ENE	NE	ENE	ENE	ENE	ENE
19	NNE	NNE	NNE	ENE	NE	NE	NE	ENE	ENE	NE	NE	NE
20	N	N	NE	ENE	ENE	ENE	ENE	ENE	ENE	NE	NE	NE
21	E	ENE	ENE	NNE	NE	NNE	E	NE	NE	NE	NE	NE
22	NE	N	N	N	N	NNE	N	N	N	N	NNW	NNW
23	N	N	NNE	NNE	N	NNE	NNE	N	NE	NE	NE	NW
24	N	N	N	N	NE	NE	NE	NE	ENE	NE	NE	NE
25	ESE	ESE	ESE	ESE	NE	NE	ENE	NE	NE	NE	NE	ENE
26	NNW	N	ENE	NE	ENE	ENE	ENE	E	ENE	SE	SE	SE
27	NE	ENE	ENE	ENE	NE	NE	ENE	NE	NE	NE	NE	ENE
28	ESE	ENE	NE	ESE	ESE	NE	NE	NE	NE	NE	ENE	NW
29	NNE	NNE	NNE	NNE	ESE	ESE	ESE	ENE	E	E	SE	SE
30	SE	SE	SE	ESE	ESE	ESE	ESE	ENE	NNE	N	N	NNW
Mean Direction.	NE	ENE	ENE	ENE	NE	NE	ENE	NE	ENE	NE	NE	NE

DECEMBER.

1	NE	NE	NE	NNE	NNE	NE	NE	NE	NE	NE	ENE	WNW
2	N	ENE	ENE	ENE	NE	NNE	NNE	ENE	N	N	N	NNW
3	N	N	N	N	N	N	N	N	N	N	NNW	NNW
4	N	N	N	N	N	N	NNE	NNE	NE	NE	NW	NNW
5	N	NNE	NNE	NNE	NE	NNE	ENE	ENE	E	ENE	ENE	ENE
6	NNE	E	ESE	ESE	SE	ESE	ESE	ESE	ESE	ESE	ESE	SSE
7	NNE	NNE	NE	NE	NE	NE	NE	NE	ENE	ENE	ENE	ENE
8	N	N	NNE	NNW	N	NE	NE	NNE	NNE	NNE	NW	NW
9	N	N	N	NNE	NNE	NNE	NE	NE	NE	NE	NE	NE
10	N	NNE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
11	NNE	NNE	NE	NE	ENE	ENE	ENE	ENE	NE	NE	NE	ENE
12	N	N	NNW	N	N	NNE	NNE	NNE	NE	NE	ENE	E
13	N	N	NNE	NE	NE	NE	NE	NE	NE	NE	NE	NW
14	E	E	E	E	E	NNE	NNE	N	ENE	ENE	ENE	ENE
15	NE	NE	NE	N	NNE	NNE	N	NNE	NE	NE	NE	NE
16	NNW	NNW	N	N	N	ENE	NE	NE	NE	ENE	NE	NE
17	ENE	NE	NE	NE	NE	NNE	N	N	NE	NE	NE	NE
18	NE	NNE	ENE	ENE	ENE	NE	ENE	NE	NE	NE	NE	NE
19	ENE	ENE	NE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	NE	NE
20	NE	ENE	ENE	ENE	E	ENE	ENE	ENE	ENE	E	ESE	NE
21	ENE	ENE	NNE	ENE	ENE	ENE	E	ESE	E	ESE	ESE	ESE
22	ENE	E	ENE	NE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE
23	ENE	ENE	ENE	NE	ENE	ENE	ENE	ENE	ENE	ENE	NE	NE
24	NNE	NNE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	NE	NE
25	NNE	NE	ENE	E	E	E	ENE	NE	NE	NE	NE	NE
26	NE	NNE	NNE	ENE	ENE	NE	ENE	NE	NE	NE	ENE	E
27	ENE	ENE	ENE	NE	NE	NE	NNE	NNE	ENE	ENE	ENE	ENE
28	N	N	N	N	N	N	N	N	N	NNW	NNW	NNW
29	NNE	N	N	N	N	N	NNE	NNE	NE	NE	ENE	ENE
30	N	N	N	N	NNE	NNE	ENE	N	N	NW	NW	NW
31	N	N	N	N	N	N	N	N	N	NNE	NNW	NNW
Mean direction.	NNE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NNE

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

NOVEMBER.

Hours.													Mean direction.	Date.
12—13	13—14	14—15	15—16	16—17	17—18	18—19	19—20	20—21	21—22	22—23	23—24			
NNE	WNW	WNW	WNW	NW	NW	NNW	NNW	NNW	N	N	N	N		1
NE	W	WNW	WNW	NW	NW	NNW	NNW	N	N	N	ESE	NNE		2
WNW	WNW	WNW	WNW	NW	NNW	NNW	NNW	N	N	ESE	E	NNE		3
ENE	WNW	WNW	NW	NW	NW	NNW	NNW	NNW	N	NNW	NNW	NNE		4
ENE	NE	NE	NW	WNW	WNW	NNW	NNW	N	N	ENE	NNE	NNE		5
NE	WNW	WNW	NW	NNW	NNW	NNW	NNW	NNW	N	N	NNE	NNE		6
W	W	W	WNW	WNW	NW	NNW	NNW	NNW	NNE	NNE	NE	NNE		7
ENE	W	W	WNW	WNW	NW	NNW	NNW	N	N	NW	NNW	N		8
WNW	WNW	W	WNW	WNW	WNW	NW	NNW	NNW	N	N	N	NW		9
WSW	WSW	WSW	WNW	WNW	WNW	NW	NNW	NNW	NNW	NNW	N	N		10
ENE	ENE	SW	WSW	WNW	W	W	WNW	N	N	NNE	NNE	NE		11
NE	WNW	WNW	WNW	WNW	NW	NNW	NNW	NNW	NNW	N	N	N		12
E	WSW	WSW	WNW	WNW	WNW	NW	NNW	NNW	N	NNE	NNE	N		13
ENE	ENE	NW	NW	NNW	NNW	NNW	NNW	N	N	N	N	N		14
WNW	WNW	NW	NW	NW	NNW	NNW	NNW	N	N	N	N	N		15
W	W	W	W	WNW	WNW	NW	NNW	NNW	N	N	NW	NE		16
ENE	W	WNW	WNW	NW	NW	NNW	NNW	N	N	N	N	N		17
ENE	W	WNW	WNW	NW	NW	NNW	NNW	NNW	N	NNE	NNE	N		18
NE	WNW	WNW	NNW	NNW	NNW	NNW	NNW	NNW	N	N	N	N		19
NE	WNW	WNW	WNW	NW	NNW	NNW	NNW	NNW	NNW	N	E	N		20
NE	WNW	WNW	W	WNW	WNW	NW	NNW	NNW	NNW	N	N	N		21
NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	N	N	N	NNW		22
WNW	WNW	NW	WNW	NW	NW	NNW	NNW	NNW	NNW	N	N	N		23
NE	W	WNW	W	W	WNW	NW	NNW	NNW	NNE	ESE	ESE	N		24
E	W	W	WNW	WNW	NNW	NNW	NNW	NNW	NNW	NNW	ENE	N		25
W	WSW	WSW	W	WNW	WNW	NW	NNW	N	N	N	NE	NNE		26
ENE	W	WNW	WNW	WNW	WNW	NW	NW	NNW	N	NNE	ENE	NNE		27
WNW	NW	NW	NNW	NNW	NNW	NNW	NNW	NNW	N	N	N	N		28
SE	SSW	SW	SW	SW	WSW	WSW	SW	SW	SW	SSW	SSW	ESE		29
NNW	NNW	NW	NW	NW	NNW	NNW	NNW	N	N	N	N	NNE		30
N	WNW	WNW	WNW	NW	NW	NNW	NNW	NNW	N	N	NNW	N	Mean direction.	

DECEMBER.

WNW	WNW	WNW	NW	NW	NW	NNW	NNW	NNW	N	N	N	NNW		1
NW	NW	NW	NNW	NNW	NNW	NNW	N	N	N	N	N	NW		2
NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	N	N	N	N	NNW		3
NW	NW	WNW	NW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	N	NNW		4
ENE	WNW	WNW	WNW	WNW	NW	NNW	NNW	NNW	NNW	N	N	N		5
W	WNW	WNW	WNW	WNW	NW	NW	NNW	NNW	N	NNE	NNE	NNE		6
WNW	WNW	WNW	NW	NNW	NNW	NNW	NNW	NNW	NNE	NE	NE	N		7
NW	NW	NW	NW	NNW	NNW	NNW	NNW	NNW	N	N	N	NNW		8
NE	WNW	NW	NW	NW	NNW	NNW	NNW	NNW	N	N	N	N		9
W	WNW	WNW	NW	NNW	NNW	NNW	N	N	N	NNE	NNE	N		10
ENE	WSW	W	WNW	WNW	NW	NNW	NNW	NNW	NNW	N	N	N		11
E	WSW	WSW	WSW	W	W	W	WNW	NNW	NNW	N	N	NW		12
NW	NW	NW	NW	NW	NW	NW	NNW	NNW	N	N	NNE	NNW		13
E	W	WNW	WNW	WNW	NNW	NNW	NNW	NNW	N	NNE	NE	N		14
WNW	NW	NW	NW	NW	NW	NNW	NNW	NNW	N	N	N	N		15
NE	WSW	WSW	W	WNW	WNW	NNW	NNW	NNW	NNW	N	N	N		16
WSW	WNW	WNW	WNW	WNW	NW	NNW	NNW	NNW	N	N	NE	N		17
NNE	N	NW	NW	NW	NNW	NNW	NNW	N	N	N	NNE	N		18
NE	NNE	NNE	NW	NW	NNW	NNW	NNW	N	N	N	N	NNE		19
NE	NE	N	NW	NW	NNW	NNW	NNW	N	N	NNE	NE	NE		20
NE	NE	NE	NW	NW	NNW	NNW	N	N	N	N	N	NE		21
NE	NE	WNW	WNW	NW	NNW	NNW	NNW	NNW	N	N	NNE	N		22
NE	NE	WNW	WNW	NNW	NNW	NNW	NNW	N	N	N	N	NNE		23
NE	NE	WNW	NW	NW	NNW	NNW	N	N	N	N	N	NNE		24
NE	NW	NW	NW	NNW	NNW	N	N	N	NNE	NNE	NE	NNE		25
WNW	WNW	NW	NW	NW	NNW	NNW	N	NNE	NNE	NNE	NE	NNE		26
WNW	WNW	NW	NW	NW	NW	NNW	NNW	N	N	N	N	N		27
NW	NNW	NNW	NW	NW	NNW	NNW	NNW	N	N	N	NNE	NNW		28
WNW	NW	NW	NW	NNW	NNW	NNW	N	N	N	N	N	N		29
NNW	NNW	NNW	NNW	NNW	NNW	N	N	N	N	N	N	NNW		30
NNW	NNW	NNW	NNW	NNW	NNW	N	N	N	N	N	N	N		31
NNW	NW	NW	NW	NW	NNW	NNW	NNW	N	N	N	NNE	N	Mean direction.	

(Averages for periods of sixty minutes from full hour to full hour of local mean time)

(IN DEGREES FAHRENHEIT.)

JANUARY.

Date.	Hours.																			
	0—1	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12	12—13	13—14	14—15	15—16	16—17	17—18	18—19	19—20
1	70·7	70·5	70·4	69·4	68·0	67·0	66·4	66·6	69·8	72·6	75·7	77·2	77·5	78·0	77·2	76·2	75·6	75·2	74·8	74·6
2	69·2	68·8	68·9	69·8	69·5	69·6	69·6	70·6	72·7	74·2	76·7	79·5	79·1	79·2	78·3	77·2	76·4	75·8	75·4	75·2
3	71·3	70·9	71·0	70·7	70·4	70·3	70·4	70·7	71·8	72·9	75·8	77·0	80·3	82·2	82·5	81·6	80·4	79·5	78·8	78·4
4	72·1	71·3	69·9	69·4	69·2	69·4	69·4	69·8	71·2	73·1	75·7	77·6	80·6	80·4	80·4	80·6	80·4	80·6	80·6	80·6
5	71·5	70·7	70·2	69·8	69·5	68·9	68·2	68·8	70·5	72·1	74·9	77·9	81·0	82·4	82·9	82·9	82·9	82·9	82·9	82·9
6	73·5	72·8	71·8	72·0	70·6	70·1	69·7	70·5	72·4	74·0	76·2	78·5	81·0	82·8	82·6	82·3	82·1	82·1	82·1	82·1
7	73·0	72·1	71·5	72·3	72·0	71·9	71·6	72·1	73·7	76·0	78·5	80·5	83·5	84·0	82·8	83·8	84·7	84·7	84·7	84·7
8	75·4	75·6	75·6	75·2	74·7	74·5	74·3	74·9	74·9	76·8	79·6	80·6	81·8	83·8	84·7	85·1	85·1	85·1	85·1	85·1
9	76·0	74·9	74·5	73·7	73·5	73·6	73·4	73·5	75·3	77·0	79·0	80·8	84·2	81·5	79·8	78·6	77·8	77·2	76·8	76·6
10	74·0	73·8	73·3	73·5	73·3	73·0	73·0	73·3	75·0	77·0	80·9	82·0	84·8	83·7	82·9	82·3	81·9	81·7	81·5	81·4
11	74·3	74·0	74·0	73·4	74·0	73·4	72·6	72·7	74·8	76·6	78·4	80·1	81·7	82·6	83·9	83·9	83·9	83·9	83·9	83·9
12	74·6	74·3	73·2	73·0	72·5	72·1	71·3	71·5	73·6	75·9	78·2	79·6	80·6	80·6	80·8	80·6	80·6	80·6	80·6	80·6
13	71·5	72·1	72·5	72·0	71·0	70·7	69·6	69·1	72·2	73·6	76·2	78·6	81·2	81·2	80·6	80·6	80·6	80·6	80·6	80·6
14	74·0	74·0	73·6	73·1	73·2	72·8	71·8	71·8	74·1	76·0	78·9	80·1	82·5	83·0	83·2	83·2	83·2	83·2	83·2	83·2
15	74·0	72·7	72·9	72·8	72·3	71·0	70·2	71·0	73·0	75·7	77·1	79·6	82·0	82·4	82·4	82·1	82·1	82·1	82·1	82·1
16	74·0	73·6	73·3	73·5	71·8	71·1	71·5	72·2	73·2	74·8	77·1	79·1	80·0	80·8	80·9	80·9	80·9	80·9	80·9	80·9
17	72·8	72·8	71·8	71·0	69·8	70·3	69·7	69·8	72·5	74·5	76·4	78·6	80·2	81·0	81·0	81·1	81·1	81·1	81·1	81·1
18	73·6	72·9	72·1	71·1	70·9	71·8	70·2	70·4	72·9	74·9	76·1	77·8	78·2	79·2	79·2	79·2	79·2	79·2	79·2	79·2
19	71·5	70·8	70·0	69·7	69·6	68·5	69·2	70·8	72·4	74·0	77·0	79·0	78·8	79·6	79·6	79·6	79·6	79·6	79·6	79·6
20	73·6	72·0	71·2	71·1	71·0	69·6	69·9	71·3	72·9	75·0	77·1	78·1	80·0	81·0	81·0	81·4	81·4	81·4	81·4	81·4
21	72·9	72·6	72·0	71·6	71·3	71·5	70·8	71·0	73·1	75·5	77·4	79·0	80·0	80·1	80·2	80·2	80·2	80·2	80·2	80·2
22	72·9	72·5	71·4	70·6	70·1	70·4	70·1	70·6	72·7	74·8	76·5	77·6	78·6	79·4	79·4	79·4	79·4	79·4	79·4	79·4
23	70·5	69·8	70·0	69·4	69·1	68·6	68·4	69·4	71·1	72·8	76·0	77·2	78·1	79·0	79·0	79·0	79·0	79·0	79·0	79·0
24	70·1	70·0	69·2	69·1	68·0	67·5	67·5	68·0	71·2	74·4	76·2	77·4	79·1	79·4	79·6	79·6	79·6	79·6	79·6	79·6
25	69·9	69·9	69·7	69·9	69·9	69·9	69·3	68·8	71·0	72·9	76·0	78·1	78·7	78·6	78·1	77·8	77·6	77·4	77·2	77·0
26	69·4	69·2	68·6	68·5	68·5	68·5	68·5	69·0	70·3	72·5	75·3	76·1	76·6	77·0	76·8	76·7	76·7	76·7	76·7	76·7
27	69·5	68·9	69·0	69·6	69·4	69·5	69·1	69·9	71·5	73·1	75·3	76·4	77·0	77·1	77·1	77·1	77·1	77·1	77·1	77·1
28	72·0	71·6	71·2	69·6	69·6	69·2	68·3	69·2	70·1	72·3	74·0	75·9	76·8	76·7	76·7	76·7	77·1	77·1	77·1	77·1
29	67·5	67·5	66·7	69·9	65·2	64·9	64·5	64·9	67·8	72·0	75·1	77·0	77·7	77·5	77·1	77·1	77·1	77·1	77·1	77·1
30	70·1	70·0	69·1	68·6	67·9	67·1	66·8	66·9	69·7	73·2	75·7	77·5	78·9	78·3	78·3	78·3	78·3	78·3	78·3	78·3
31	71·1	70·4	69·6	69·5	69·0	68·5	68·3	68·4	70·2	71·5	72·9	73·6	74·9	75·0	75·0	75·0	75·0	75·0	75·0	75·0
Mean . .	72·1	71·7	71·2	70·9	70·5	70·2	69·8	70·2	72·2	74·2	76·6	78·3	79·9	80·3	80·3	80·2	80·1	80·1	80·1	80·1
Variation . .	−2·6	−3·0	−3·5	−3·8	−4·2	−4·5	−4·9	−4·5	−2·5	−0·5	+1·9	+3·6	+5·2	+5·6	+5·6	+5·5	+5·3	+5·3	+5·3	+5·3

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1	70·9	69·6	69·4	68·9	68·0	67·5	66·6	66·9	68·9	70·5	71·2	72·7	73·9	73·8	73·6	73·4	73·2	73·1	73·0	72·9
2	67·4	66·8	66·0	65·5	64·6	64·9	65·4	65·8	67·3	69·5	71·0	72·2	72·3	71·7	71·2	70·8	70·5	70·3	70·2	70·1
3	66·9	66·5	66·8	67·4	66·5	65·8	64·0	63·6	64·3	66·0	69·1	70·5	72·0	71·5	70·8	70·3	69·9	69·6	69·4	69·3
4	63·5	63·5	62·3	62·0	61·0	61·1	60·1	60·3	63·2	67·0	69·5	70·8	72·2	72·6	73·0	73·2	73·2	73·2	73·2	73·2
5	64·0	64·4	62·3	62·2	61·5	61·5	60·5	62·9	66·1	69·0	72·5	75·2	76·8	78·4	78·4	78·4	78·4	78·4	78·4	78·4
6	69·6	68·9	68·5	68·0	66·2	65·9	65·3	66·2	68·5	70·5	73·2	75·0	76·4	76·5	76·8	77·0	77·0	77·0	77·0	77·0
7	68·0	67·4	67·0	66·9	67·4	67·2	66·2	67·0	70·3	72·6	73·9	74·7	75·9	77·0	78·2	78·3	78·4	78·4	78·4	78·4
8	69·2	68·8	67·8	67·2	67·0	66·8	66·6	66·9	70·3	73·1	75·0	77·0	77·7	78·7	78·8	78·8	78·8	78·8	78·8	78·8
9	69·6	69·4	68·8	68·9	68·8	68·6	67·5	68·1	70·5	72·6	76·3	77·7	78·9	79·0	79·0	79·0	79·0	79·0	79·0	79·0
10	70·4	69·9	69·4	68·9	68·8	68·1	67·9	68·5	70·5	71·9	74·0	76·0	76·8	77·4	78·1	78·4	78·4	78·4	78·4	78·4
11	71·4	72·0	71·5	71·5	71·4	71·5	70·8	71·6	73·1	74·8	77·1	79·3	80·6	81·2	81·7	81·7	81·7	81·7	81·7	81·7
12	72·5	71·9	71·4	70·9	70·1	70·1	70·6	71·8	73·6	76·5	77·4	77·9	77·6	78·3	78·3	78·3	78·3	78·3	78·3	78·3
13	73·8	73·7	72·6	71·8	71·5	71·2	70·8	71·1	74·0	76·0	76·6	77·0	77·0	77·0	77·0	77·0	77·0	77·0	77·0	77·0
14	71·8	71·5	71·4	71·2	70·8	70·1	69·6	69·0	71·2	73·3	76·1	75·1	75·5	75·8	75·9	75·9	75·9	75·9	75·9	75·9
15	68·0	67·2	68·1	67·0	67·0	66·3	65·6	65·9	68·2	71·4	73·2	75·9	76·5	77·6	78·1	78·1	78·1	78·1	78·1	78·1
16	68·9	68·1	67·4	66·8	65·6	65·5	65·2	67·1	70·8	73·0	77·0	79·9	81·2	80·4	81·0	81·0	81·0	81·0	81·0	81·0
17	70·3	70·1	68·8	68·0	68·2	67·8	67·1	69·0	71·4	72·9	76·0	78·0	79·6	80·4	80·4	80·4	80·4	80·4	80·4	80·4
18	71·7	71·6	70·9	69·6	68·7	68·4	67·9	70·0	72·2	74·5	77·7	78·3	80·0	80·6	81·5	81·5	81·5	81·5	81·5	81·5
19	70·9	70·6	71·1	71·2	70·5	69·5	68·2	69·2	73·0	76·5	78·4	79·0	79·0	79·0	79·0	79·0	79·0	79·0	79·0	79·0
20	71·6	72·2	72·0	71·4	70·6	69·6	69·7	71·0	73·5	75·3	77·6	79·3	80·5	80·6	80·6	80·6	80·6	80·6	80·6	80·6
21	72·1	72·6	71·6	71·1	70·7	70·3	69·8	70·5	72·6	74·7	76·0	77·2	78·0	78·6	78·2	78·2	78·2	78·2	78·2	78·2
22	72·5	72·2	71·5	70·8	69·8	70·2	69·5	69·9	72·0	75·0	76·6	77·7	79·1	80·0	80·1	80·1	80·1	80·1	80·1	80·1
23	71·5	71·0	70·3	70·8	70·9	70·3	69·5	70·5	72·3	74·1	75·9	80·3	81·2	81·1	81·0	81·0	81·0	81·0	81·0	81·0
24	72·8	72·3	72·3	71·9	70·7	70·3	70·1	71·0	73·5	73·9	78·8	81·4	81·9	83·9	84·3	84·3	84·3	84·3	84·3	84·3
25	74·3	73·9	73·5	74·2	74·0	72·9	72·0	73·0	75·3	77·4	80·5	83·3	83·4	84·3	83·8	83·8	83·8	83·8	83·8	83·8
26	74·6	74·2	73·6	73·1	73·4	73·0	72·5	73·7	76·3	77·8	80·9	84·3	84·5	84·0	84·0	84·0	84·0	84·0	84·0	84·0
27	75·3	75·5	74·7	73·5	72·6	72·4	71·9	72·8	75·2	77·8	79·9	82·0	84·7	85·8	87·1	87·1	87·1	87·1	87·1	87·1
28	73·9	72·8	72·7	72·5	72·2	72·0	71·4	72·0	74·9	77·1	79·5	81·8	84·2	82·9	81·9	81·9	81·9	81·9	81·9	81·9
29	74·3	73·9	73·5	73·0	72·6	72·8	72·0	72·6	74·3	76·5	78·5	78·7	76·7	81·1	82·0	82·0	82·0	82·0	82·0	82·0
Mean . .	70·7	70·3	69·9	69·6	69·0	68·7	68·1	68·9	71·3	73·5	75·8	77·5	78·5	79·0	79·1	79·1	79·1	79·1	79·1	79·1
Variation . .	−2·6	−3·0	−3·4	−3·7	−4·3	−4·6	−5·2	−4·4	−2·0	+0·2	+2·5	+4·2	+5·2	+5·7	+5·8	+5·8	+5·8	+5·8	+5·8	+5·8

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

JANUARY. (IN DEGREES FAHRENHEIT.)

Hours. 15—16	16—17	17—18	18—19	19—20	20—21	21—22	22—23	23—24	Mean.	Maximum. Time.	Maximum. Mag.	Minimum. Time.	Minimum. Mag.	Date.
										H. M.		H. M.		
76·6	75·5	74·8	74·6	74·3	73·4	72·2	71·3	70·4	72·5	13 23	78·4	6 40	66·1	1
77·7	76·7	76·9	75·1	74·5	74·0	72·9	72·4	72·4	73·6	11 52	80·1	2 5	68·1	2
81·6	80·1	78·3	77·0	76·2	75·0	74·4	72·8	72·4	74·9	14 26	82·6	5 10	70·2	3
80·3	79·4	77·9	76·6	75·3	74·5	73·9	72·4	71·4	74·2	13 51	81·1	3 20	68·6	4
82·8	81·1	79·1	77·0	76·0	75·1	74·8	74·7	74·0	74·7	14 0	83·2	6 35	68·0	5
81·8	80·4	78·0	76·2	75·5	75·0	74·3	74·0	73·7	75·3	13 30	83·2	6 26	69·4	6
82·0	80·1	78·5	77·7	77·5	77·0	76·9	75·9	75·3	76·5	13 12	84·7	2 30	71·3	7
83·5	82·0	79·6	78·2	77·5	77·4	76·9	76·5	75·6	77·9	12 18	84·9	6 34	73·8	8
79·5	79·1	78·5	77·5	77·0	76·5	76·3	75·7	74·8	76·9	12 40	85·2	7 3	73·0	9
82·6	81·0	79·1	78·6	78·0	77·3	76·3	75·5	78·8	77·3	12 30	85·0	3 58	72·4	10
84·1	83·0	81·7	79·7	78·5	77·5	76·2	75·3	75·1	77·4	15 10	84·6	6 15	72·3	11
80·0	78·0	77·0	76·4	75·6	74·9	73·8	72·5	71·9	75·5	14 12	81·2	6 26	71·0	12
80·0	79·1	78·2	77·1	76·3	75·6	74·2	73·4	73·5	75·0	12 30	81·6	7 12	69·0	13
84·1	81·8	80·0	78·4	77·7	76·6	75·5	74·4	75·2	76·9	15 0	84·6	7 8	71·4	14
81·9	81·2	79·6	78·5	77·8	76·7	76·7	76·3	75·9	76·2	12 50	82·6	6 40	70·0	15
80·6	79·6	78·2	77·4	76·7	75·7	75·4	74·9	73·8	75·8	14 8	81·0	6 10	70·8	16
81·0	79·5	78·0	77·0	76·6	76·1	75·0	73·9	73·1	75·1	14 30	81·2	6 18	69·5	17
79·7	79·4	78·0	76·9	76·5	76·0	74·9	73·5	72·4	74·9	14 20	80·4	6 56	69·8	18
79·9	79·2	77·9	77·0	76·6	76·0	75·6	74·5	73·5	74·6	13 36	80·0	6 8	68·2	19
80·2	79·0	77·7	76·8	76·1	75·4	74·8	73·7	73·6	75·1	14 26	81·7	6 20	69·1	20
80·2	79·2	77·4	76·5	76·3	75·6	75·1	74·5	73·4	75·3	15 0	80·7	5 40	70·3	21
79·5	78·1	76·5	75·5	75·0	74·0	72·6	71·6	71·0	74·2	14 27	80·1	4 30	69·8	22
79·0	78·0	76·6	75·2	74·7	74·2	73·2	72·5	71·6	73·4	13 54	79·2	6 42	68·2	23
79·4	78·0	76·8	75·4	74·9	73·9	72·3	71·2	70·4	73·3	15 0	80·0	6 45	67·3	24
77·7	77·1	76·9	74·8	74·1	73·6	73·0	71·4	70·1	73·3	12 47	79·2	6 45	69·0	25
77·7	76·8	75·2	74·2	73·8	73·4	72·7	72·0	70·5	72·6	14 22	77·9	2 30	68·3	26
78·5	78·0	76·6	75·6	75·2	74·7	73·8	72·9	72·3	73·4	14 25	78·9	1 40	68·4	27
76·1	75·0	74·0	73·2	72·7	72·3	71·6	70·4	69·5	72·3	14 28	77·6	7 10	67·9	28
76·6	75·9	75·0	74·1	73·6	72·9	72·0	71·1	70·6	71·4	12 50	78·1	7 0	64·2	29
77·5	76·7	75·2	74·1	73·9	73·7	73·2	72·6	71·9	72·8	12 20	79·4	7 20	66·8	30
74·5	74·4	73·5	72·9	72·6	72·3	71·7	71·9	72·1	71·8	13 55	76·0	7 10	68·1	31
79·9	78·8	77·4	76·3	75·7	75·0	74·2	73·4	72·7	74·7					Mean.
+5·2	+4·1	+2·7	+1·6	+1·0	+0·3	−0·5	−1·3	−2·0						Variation.

FEBRUARY.

6														
73·4	73·3	72·4	71·6	71·1	70·0	69·3	68 8	68·0	70·4	13 32	74·5	6 45	66·2	1
71·9	71·2	70·5	70·2	70·1	69·2	68·1	67·7	67·3	68·6	12 42	73·0	4 50	54·5	2
69·9	69·9	68·	67·6	67·3	66·7	66·0	64·7	63·7	67·3	12 35	72·4	6 50	53·1	3
72·6	71·9	70·	69·0	68·5	68·0	66·4	65·6	64·6	66·8	14 20	73·2	7 10	59·6	4
77·5	76·6	74·	73·0	71·7	70·5	69·7	69·0	68·6	69·5	13 30	78·7	6 45	60·0	5
76·0	74·9	73·	72·2	71·5	70·9	69·9	68·6	68·4	70·9	14 53	77·0	7 0	65·0	6
77·1	76·2	73·	72·6	72·0	71·5	70·6	69·7	69·2	71·3	14 45	79·1	6 35	66·0	7
77·5	77·2	74·	73·5	72·5	72·0	71·2	70·4	70·1	72·1	14 0	79·4	7 5	66·0	8
79·4	78·0	76·2	74·6	73·6	72·5	71·6	71·2	70·6	73·1	13 20	80·9	6 55	67·2	9
77·7	77·1	75·6	74·6	74·2	73·5	73·0	71·9	71·6	72·7	14 13	78·7	5 47	67·4	10
81·2	79·6	77·8	76·2	75·6	75·0	74·2	73·7	73·2	76·3	13 55	82·4	6 30	70·6	11
78·	76·7	75·4	74·4	74·0	73·4	73·0	73·0	74·3	13 32	78·7	5 0	69·9	12
78·9	75·7	74·0	73·2	73·0	73·0	72·5	71·0	71·0	73·8	15 10	78·5	7 0	70·5	13
75·6	75·2	74·0	72·9	72·5	71·8	70·5	69·2	68·1	72·4	10 43	76·9	6 50	68·0	14
77·5	76·4	74·5	73·4	73·0	72·5	71·8	70·2	69·5	71·6	14 14	78·7	6 51	66·3	15
80·5	79·1	76·9	75·5	74·4	73·6	72·9	72·0	71·4	73·1	14 50	81·8	6 48	69·6	16
79·6	79·0	76·9	75·2	74·8	73·6	72·7	71·9	71·0	73·4	13 32	81·0	6 30	69·8	17
80·9	79·6	77·5	75·7	75·0	74·2	73·4	72·4	71·6	74·3	14 52	81·8	6 50	67·4	18
79·3	78·0	76·5	75·0	74·5	73·6	72·6	71·8	71·1	74·1	13 43	79·9	6 30	68·0	19
79·6	79·1	77·9	76·6	75·2	74·2	73·3	72·3	71·9	74·9	13 0	81·0	5 20	69·4	20
78·2	77·5	76·1	74·8	74·2	73·2	72·3	72·3	72·8	73·9	13 12	79·0	6 40	68·5	21
80·0	78·9	77·1	75·8	75·2	74·3	73·2	72·0	71·3	74·3	13 43	80·5	6 38	69·4	22
81·0	79·9	78·0	76·5	75·7	74·4	73·8	73·4	72·7	74·9	13 5	81·6	6 40	69·2	23
84·2	82·8	80·5	78·5	77·7	77·3	76·7	75·6	74·9	76·7	15 20	84·8	6 58	69·5	24
84·2	82·6	80·2	78·5	77·6	77·0	75·9	74·9	74·8	77·6	13 45	84·6	6 50	71·9	25
83·6	83·0	80·8	79·3	78·6	77·1	76·0	76·0	75·6	77·9	12 35	84·8	6 40	72·3	26
86·4	84·1	81·2	79·6	78·4	77·4	76·6	75·9	74·9	78·1	14 55	87·5	6 28	71·5	27
81·6	80·7	79·2	78·0	77·4	76·8	75·6	75·2	74·9	76·7	12 35	85·2	7 0	71·2	28
31·6	81·3	80·5	79·8	79·6	79·0	78·2	77·3	76·5	76·9	14 20	82·3	6 30	71·6	29
78·7	77·7	76·0	74·7	74·1	73·4	72·5	71·7	71·1	73·8					Mean.
+5·4	+4·4	+2·7	+1·4	+0·8	+0·1	−0·8	−1·6	−2·2						Variation.

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

MARCH. (IN DEGREES FAHRENHEIT.)

Date.	Hours.																							
	0—1	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12	12—13	13—14	14—15	15—16	16—17	17—18	18—19	19—20	20—21	21—22	22—23	23—24
1	75·1	74·0	73·1	72·5	72·2	72·0	71·9	73·6	76·4	80·1	83·0	83·6	83·8	84·2	84·3	84·2	83·8	83·2	82·6	82·2	81·9	81·7	81·5	81·3
2	74·2	73·6	73·7	73·2	72·6	72·4	71·6	73·2	77·0	79·0	80·8	82·1	82·3	82·5	82·6	82·4	82·1	81·8	81·5	81·3	81·2	81·1	81·0	80·9
3	75·3	74·0	73·2	73·0	72·7	72·1	71·1	72·6	76·2	78·6	79·7	80·2	81·4	81·5	81·4	81·2	81·0	80·8	80·6	80·4	80·3	80·2	80·1	80·0
4	75·6	75·2	74·8	74·0	73·1	72·6	72·8	74·0	75·2	76·6	78·1	79·1	80·4	81·0	81·5	81·6	81·6	81·5	81·4	81·3	81·2	81·1	81·0	80·9
5	74·7	74·6	73·8	74·3	74·0	73·6	73·6	74·3	75·8	77·0	78·6	79·3	79·0	79·3	78·9	78·6	78·3	78·1	77·9	77·8	77·7	77·6	77·5	77·4
6	70·6	70·0	69·3	69·0	68·4	68·2	67·2	68·5	71·4	74·0	76·0	76·8	77·9	78·6	78·5	78·3	78·1	77·9	77·7	77·6	77·5	77·4	77·3	77·2
7	70·2	70·0	70·2	69·3	69·5	68·3	67·4	68·5	71·9	74·6	76·8	78·4	79·4	79·7	79·4	79·2	79·0	78·8	78·6	78·4	78·3	78·2	78·1	78·0
8	73·5	73·6	73·1	71·8	70·4	69·8	70·0	71·6	74·1	76·4	78·0	79·0	80·0	80·6	81·0	81·0	80·9	80·8	80·7	80·6	80·5	80·4	80·3	80·2
9	73·5	73·0	73·9	73·6	72·8	72·4	72·0	72·6	75·3	77·2	79·7	80·6	81·4	81·7	81·8	81·8	81·7	81·6	81·5	81·4	81·3	81·2	81·1	81·0
10	74·2	74·4	74·4	73·9	72·9	72·0	72·0	73·2	76·5	79·7	81·2	82·4	83·1	82·6	82·2	82·0	81·8	81·6	81·4	81·3	81·2	81·1	81·0	80·9
11	76·6	75·8	74·5	74·4	74·4	74·2	73·9	75·5	77·8	79·7	81·8	81·9	82·4	82·5	82·5	82·4	82·2	82·0	81·8	81·7	81·6	81·5	81·4	81·3
12	76·2	75·7	75·6	75·1	74·5	73·9	73·2	74·2	77·0	78·9	80·5	80·7	82·3	82·0	82·0	81·9	81·8	81·7	81·6	81·5	81·4	81·3	81·2	81·1
13	76·7	76·8	76·4	76·1	75·0	74·3	74·2	76·0	78·0	80·1	81·5	81·9	82·8	83·3	83·2	83·1	83·0	82·9	82·8	82·7	82·6	82·5	82·4	82·3
14	77·4	77·4	76·8	76·6	76·0	75·4	75·1	75·8	77·7	79·7	81·5	82·6	83·2	83·2	83·8	84·4	84·2	84·0	83·8	83·6	83·4	83·2	83·0	82·8
15	77·0	76·6	76·3	76·1	76·9	76·7	76·6	77·0	79·4	81·2	83·4	84·6	85·8	86·6	86·6	86·5	86·4	86·3	86·2	86·1	86·0	85·9	85·8	85·7
16	79·6	79·9	79·7	79·3	79·0	78·5	78·1	79·0	79·8	81·5	83·4	84·3	84·6	84·0	83·7	83·4	83·2	83·0	82·8	82·6	82·4	82·2	82·0	81·8
17	78·0	77·5	77·1	76·6	77·2	77·0	77·1	78·3	80·5	82·3	83·1	83·7	84·2	84·6	85·1	85·6	85·4	85·2	85·0	84·8	84·6	84·4	84·2	84·0
18	77·5	77·0	76·4	76·0	75·6	76·1	76·5	76·7	78·5	80·6	82·2	83·4	84·7	85·4	85·5	85·6	85·4	85·2	85·0	84·8	84·7	84·6	84·5	84·4
19	76·0	75·4	75·2	75·0	74·5	73·9	74·6	76·0	78·6	79·9	82·1	83·1	84·1	84·8	85·0	85·2	85·0	84·8	84·6	84·4	84·2	84·0	83·8	83·6
20	77·4	77·2	76·6	76·0	74·8	74·5	76·9	79·2	81·2	83·2	83·5	83·4	84·2	84·5	84·6	84·7	84·6	84·5	84·4	84·3	84·2	84·1	84·0	83·9
21	77·9	77·5	76·7	76·2	75·6	74·7	74·5	76·4	80·0	82·4	83·6	84·5	85·4	86·2	85·8	85·4	85·2	85·0	84·8	84·6	84·4	84·2	84·0	83·8
22	77·1	76·6	76·2	76·2	75·8	75·5	75·7	77·5	79·8	81·2	82·1	83·2	84·1	84·2	85·0	85·8	85·6	85·4	85·2	85·0	84·8	84·6	84·4	84·2
23	76·6	76·4	76·0	75·6	76·0	76·0	76·1	77·5	79·4	81·0	82·3	83·0	83·5	83·8	84·1	84·4	84·2	84·0	83·8	83·6	83·4	83·2	83·0	82·8
24	77·4	77·2	76·9	76·8	76·4	76·3	76·5	77·8	79·9	81·5	82·7	83·9	84·4	84·6	84·5	84·4	84·2	84·0	83·8	83·6	83·4	83·2	83·0	82·8
25	79·0	78·2	78·0	77·6	77·5	77·0	76·8	79·2	83·0	85·7	87·2	88·0	88·0	88·5	88·7	88·6	88·4	88·2	88·0	87·8	87·6	87·4	87·2	87·0
26	81·0	80·7	80·1	79·2	78·2	77·9	78·8	81·6	84·7	86·8	86·8	87·9	89·2	89·3	89·2	89·1	89·0	88·9	88·8	88·7	88·6	88·5	88·4	88·3
27	79·5	79·1	78·8	77·6	77·6	77·2	77·8	80·2	82·4	84·4	85·2	85·4	85·8	85·9	85·8	85·7	85·6	85·5	85·4	85·3	85·2	85·1	85·0	84·9
28	78·3	78·8	79·2	79·5	78·7	78·6	80·1	82·3	84·2	84·8	85·4	85·6	85·6	85·6	85·9	86·0	86·0	86·0	86·0	86·0	86·0	86·0	86·0	86·0
29	78·4	77·6	76·9	76·8	76·9	77·0	77·7	79·0	80·3	82·1	83·6	84·9	85·6	86·0	86·0	86·0	85·9	85·8	85·7	85·6	85·5	85·4	85·3	85·2
30	79·8	79·5	78·4	77·4	77·6	77·5	78·2	79·5	81·3	83·0	84·1	85·0	85·4	86·0	86·3	86·6	86·6	86·6	86·6	86·5	86·4	86·3	86·2	86·1
31	79·3	79·2	78·7	79·2	78·6	78·1	78·4	80·5	82·0	83·4	84·3	85·0	85·6	86·0	86·3	86·5	86·6	86·6	86·6	86·6	86·6	86·6	86·6	86·6
Mean .	76·6	76·3	75·8	75·4	75·0	74·6	74·6	76·0	78·6	80·5	82·0	82·8	83·6	84·0	84·1	84·1	83·9	83·7	83·5	83·3	83·2	83·0	82·9	82·8
Variation .	−2·5	−2·8	−3·3	−3·7	−4·1	−4·5	−4·5	−3·1	−0·6	+1·4	+2·9	+3·7	+4·6	+4·9	+4·9	+4·8	+4·6	+4·4	+4·2	+4·0	+3·9	+3·8	+3·7	+3·6

APRIL.

1	79·1	78·1	77·8	77·5	77·5	77·3	77·1	80·1	82·3	83·5	84·5	85·0	86·0	86·8	86·8	86·8	86·8	86·8	86·8	86·8	86·8	86·8	86·8	86·8
2	81·1	80·2	80·1	79·6	79·0	78·6	79·0	81·2	83·8	85·3	85·5	86·1	86·6	87·7	88·6	88·6	88·6	88·6	88·6	88·6	88·6	88·6	88·6	88·6
3	82·1	82·2	82·0	81·6	81·4	81·2	81·2	82·0	83·8	86·1	87·6	87·7	88·4	88·6	88·5	88·5	88·5	88·5	88·5	88·5	88·5	88·5	88·5	88·5
4	82·3	82·4	82·4	82·4	82·2	81·9	81·3	82·4	83·5	84·4	86·6	86·9	87·4	87·8	87·6	87·4	87·2	87·0	86·8	86·6	86·4	86·2	86·0	85·8
5	83·1	82·5	82·4	82·4	82·1	82·1	82·0	82·7	84·9	87·0	88·9	90·4	91·4	90·4	89·5	89·0	88·5	88·0	87·5	87·0	86·5	86·0	85·5	85·0
6	82·5	82·0	81·6	81·5	81·4	80·5	80·5	82·0	83·7	85·4	87·3	88·8	90·8	91·5	91·6	91·6	91·6	91·6	91·6	91·6	91·6	91·6	91·6	91·6
7	83·7	83·5	83·0	82·6	82·4	82·1	82·2	83·8	85·4	86·5	87·6	88·1	88·1	88·4	88·3	88·2	88·1	88·0	87·9	87·8	87·7	87·6	87·5	87·4
8	82·5	82·2	81·8	81·5	81·5	81·2	81·2	82·3	84·5	85·9	87·1	87·6	88·2	88·0	88·0	88·0	88·0	88·0	88·0	88·0	88·0	88·0	88·0	88·0
9	79·5	79·4	79·1	78·8	78·5	78·6	79·5	80·9	83·0	84·3	85·0	85·7	86·9	87·4	87·5	87·6	87·7	87·8	87·9	88·0	88·1	88·2	88·3	88·4
10	79·4	78·7	78·5	78·9	78·9	78·5	79·0	80·7	82·4	83·6	85·1	86·5	87·6	88·0	88·5	88·6	88·7	88·8	88·9	89·0	89·1	89·2	89·3	89·4
11	81·1	81·1	79·7	78·5	78·6	79·6	79·5	82·0	83·2	84·6	85·2	87·0	87·4	87·6	87·8	88·0	88·2	88·4	88·6	88·8	89·0	89·2	89·4	89·6
12	83·7	83·4	82·5	81·4	80·6	81·4	82·4	84·0	86·5	86·8	87·6	88·8	89·7	90·8	91·4	91·8	92·2	92·6	93·0	93·4	93·8	94·2	94·6	95·0
13	82·7	81·9	81·5	81·1	80·5	80·4	81·2	83·1	84·5	85·5	86·6	87·5	89·0	90·5	89·8	89·1	88·4	87·7	87·0	86·3	85·6	84·9	84·2	83·5
14	82·7	81·5	80·6	81·4	80·6	80·6	80·9	82·8	83·4	87·0	88·0	89·0	90·3	90·5	90·2	89·9	89·6	89·3	89·0	88·7	88·4	88·1	87·8	87·5
15	81·4	80·7	80·4	80·1	79·6	79·8	79·7	81·2	83·6	85·5	86·5	87·1	88·3	88·1	88·0	87·9	87·8	87·7	87·6	87·5	87·4	87·3	87·2	87·1
16	81·2	80·7	80·4	80·3	79·4	79·4	79·6	81·5	83·1	84·7	85·5	86·7	87·5	88·2	88·8	89·4	90·0	90·6	91·2	91·8	92·4	93·0	93·6	94·2
17	81·1	81·2	80·6	80·5	80·2	79·9	80·7	81·9	83·7	84·7	85·9	86·4	86·6	87·4	87·3	87·2	87·1	87·0	86·9	86·8	86·7	86·6	86·5	86·4
18	79·7	80·0	80·0	79·7	79·7	79·7	80·0	81·5	82·7	84·0	85·7	86·9	87·3	87·8	87·6	87·4	87·2	87·0	86·8	86·6	86·4	86·2	86·0	85·8
19	80·6	81·1	79·3	78·5	78·6	79·6	79·5	80·7	82·5	83·9	85·5	86·6	87·5	87·5	87·5	87·5	87·5	87·5	87·5	87·5	87·5	87·5	87·5	87·5
20	80·3	79·6	79·5	79·5	79·1	78·0	79·0	81·0	82·2	83·5	84·6	85·7	86·1	86·1	86·0	86·0	86·0	86·0	86·0	86·0	86·0	86·0	86·0	86·0
21	80·6	80·5	80·0	79·9	79·2	78·6	79·3	81·2	83·5	85·0	86·2	87·2	87·6	87·2	86·8	86·4	86·0	85·6	85·2	84·8	84·4	84·0	83·6	83·2
22	80·5	80·5	80·2	79·7	79·0	78·5	79·5	81·6	83·5	84·7	86·3	87·0	88·1	88·4	88·4	88·4	88·4	88·4	88·4	88·4	88·4	88·4	88·4	88·4
23	80·5	80·5	80·0	79·5	79·1	79·3	79·9	81·6	83·5	85·8	87·1	87·9	88·5	88·5	88·5	88·5	88·5	88·5	88·5	88·5	88·5	88·5	88·5	88·5
24	81·9	81·6	81·5	81·2	80·5	80·1	80·8	82·3	84·0	85·2	86·1	86·9	87·5	87·5	87·5	87·5	87·5	87·5	87·5	87·5	87·5	87·5	87·5	87·5
25	81·3	80·9	80·2	79·6	79·0	78·9	78·8	81·5	83·3	84·2	85·3	86·5	87·2	88·2	88·0	87·8	87·6	87·4	87·2	87·0	86·8	86·6	86·4	86·2
26	81·5	81·1	80·0	79·6	79·6	79·7	80·8	82·5	84·4	85·4	86·2	87·4	87·3	87·3	87·3	87·3	87·3	87·3	87·3	87·3	87·3	87·3	87·3	87·3
27	81·6	80·9	80·5	80·6	80·0	80·4	80·7	82·0	83·5	84·8	85·6	86·6	87·5	87·5	87·5	87·5	87·5	87·5	87·5	87·5	87·5	87·5	87·5	87·5
28	81·5	81·4	80·9	80·5	80·1	80·0	81·0	82·4	83·6	84·3	86·0	86·6	87·6	88·0	88·6	89·2	89·8	90·4	91·0	91·6	92·2	92·8	93·4	94·0
29	81·8	81·5	81·5	81·5	81·5	80·7	80·8	82·8	84·0	85·2	86·1	86·9	87·9	88·6	89·2	89·8	90·4	91·0	91·6	92·2	92·8	93·4	94·0	94·6
30	82·1	81·3	80·5	80·5	80·0	80·2	81·4	83·7	84·5	85·8	85·9	87·7	88·2	88·4	86·9	85·4	83·9	82·4	80·9	79·4	77·9	76·4	74·9	73·4
Mean .	81·5	81·1	80·7	80·4	80·0	79·8	80·3	82·0	83·7	85·1	86·3	87·2	88·0	88·4	88·1	87·8	87·5	87·2	86·9	86·6	86·3	86·0	85·7	85·4
Variation .	−2·2	−2·6	−3·0	−3·3	−3·7	−3·9	−3·4	−1·7	0·0	+1·4	+2·6	+3·5	+4·3	+4·7	+4·6	+4·3	+4·0	+3·7	+3·4	+3·1	+2·8	+2·5	+2·2	+1·9

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

MARCH. (IN DEGREES FAHRENHEIT.)

Hours.										Mean.	Maximum.			Minimum.			Date.
15—16	16—17	17—18	18—19	19—20	20—21	21—22	22—23	23—24			Time.		Mag.	Time.		Mag.	
											H.	M.		H.	M.		
84·6	83·5	81·5	79·8	79·0	78·5	77·8	76·7	76·5	78·2		14	23	84·2	6	35	71·7	1
82·9	82·3	80·9	79·5	78·4	77·5	77·0	76·6	76·1	77·6		14	23	83·0	6	45	71·6	2
81·2	80·3	79·0	77·5	76·9	76·4	76·0	75·4	75·1	76·7		14	18	82·2	6	40	70·8	3
80·8	80·4	78·8	77·5	76·8	76·4	76·2	76·1	75·8	76·8		14	23	82·0	5	35	72·5	4
78·3	77·2	75·2	73·8	73·1	72·5	72·2	71·8	71·1	75·3		12	45	79·5	23	40	71·0	5
78·0	77·4	76·2	74·7	74·2	73·9	73·6	72·8	71·6	73·2		13	40	79·4	6	35	67·0	6
80·0	79·3	78·1	76·5	75·6	75·0	74·6	72·8	72·7	74·1		14	30	80·6	6	30	67·1	7
81·0	80·0	79·0	77·8	77·1	76·6	76·0	75·2	74·1	75·8		13	55	81·2	6	20	69·6	8
81·1	79·8	78·5	77·4	77·0	76·7	76·3	75·7	74·8	76·6		13	28	82·4	7	15	71·9	9
81·1	80·1	79·2	78·5	78·4	78·0	77·6	77·4	77·0	77·6		12	47	83·6	5	40	71·6	10
82·4	81·4	80·0	78·7	78·0	77·6	77·5	77·2	77·0	78·2		14	28	82·8	6	30	73·7	11
82·6	82·2	81·0	79·5	78·9	78·1	77·6	77·2	76·6	78·2		14	20	83·6	6	35	73·2	12
83·6	82·8	81·1	79·8	79·2	79·0	78·4	77·9	77·5	79·1		15	33	84·0	5	56	74·0	13
84·0	82·9	81·8	80·6	80·2	79·6	78·5	77·8	77·3	79·4		14	7	84·7	6	0	75·0	14
86 0	84·5	83·2	82·3	81·6	81·0	80·9	80·1	74·5	80·8		14	20	87·2	6	30	75·2	15
85·1	84·2	82·5	81·0	80·2	79·8	79·6	79·6	78·8	81·2		15	20	85·5	6	20	78·0	16
85·0	84·4	82·6	81·0	80·2	79·7	78·7	78·2	77·9	80·4		14	25	86·4	5	50	76·4	17
85·4	84·4	82·8	80·8	80·0	79·5	78·8	77·5	77·0	79·9		14	32	86·0	5	55	77·5	18
84·4	83·2	81·6	80·4	79·7	79·2	78·9	77·8	77·4	79·2		14	43	85·2	4	30	73·6	19
83·8	83·4	82·0	81·5	79·9	79·7	79·2	78·5	78·5	79·7		14	37	85·4	6	3	73·3	20
85·0	81·2	82·7	82·0	81·5	79·7	79·5	78·7	77·7	80·5		13	35	86·5	5	48	74·4	21
84·8	83·7	81·8	80·2	79·7	79·2	78·7	78·3	77·8	79·7		13	53	85·6	6	15	75·4	22
84·9	84·3	83·2	81·5	80·6	80·0	79·4	78·3	77·8	79·9		15	22	85·2	4	5	75·4	23
84·2	82·9	81·8	80·6	80·5	80·5	80·4	79·5	79·3	80·5		12	32	85·0	5	56	76·2	24
88·5	86·9	86·7	85·5	85·4	85·2	84·6	83·2	82·0	83·4		13	32	88·9	6	29	76·5	25
88·2	86·6	84·8	84·1	83·2	82·1	81·7	81·1	80·4	83·4		12	32	88·7	5	42	77·6	26
86·8	85·2	83·7	82·0	81·2	81·0	80·2	79·8	79·0	81·7		13	8	86·4	5	48	77·0	27
85·7	85·0	83·3	81·5	80·7	80·3	79·9	79·3	78·6	81·7*		14	12	86·4	5	56	78·2	28
85·2	84·9	83·8	82·9	81·5	81·1	80·6	80·1	79·9	81·2		12	3	86·8	2	56	76·5	29
85·6	85·4	84·4	82·9	82·4	81·9	81·6	80·8	79·6	81·8		13	55	86·6	3	30	77·3	30
86·4	84·8	83·2	81·7	81·1	80·9	80·2	79·6	79·5	81·8		15	20	87·1	5	48	77·4	31
83·7	82·9	81·4	80·0	79·4	78·9	78·4	77·8	77·2	79·1								Mean.
+4·6	+3·8	+2·3	+0·9	+0·3	−0·2	−0·7	−1·3	−1·9									Varia ion.

APRIL.

86·5	85·4	83·5	82·0	81·5	80·5	79·8	79·5	80·6	81·8	13	40	87·0	6	0	77·0	1
86·8	86·1	84·6	83·5	82·8	82·5	82·5	82·6	82·5	83·1	14	32	87·2	5	27	78·4	2
87·6	86·9	85·8	84·5	83·8	83·3	83·0	82·6	82·3	84·4	13	48	89·0	6	0	81·0	3
88·4	87·6	85·9	84·7	84·1	83·8	83·8	83·8	83·7	84·5	15	38	88·5	6	35	81·2	4
88·7	87·1	86·0	85·0	84·6	84·5	84·0	83·5	83·4	85·4	12	12	92·4	6	34	81·8	5
91·4	90·3	88·7	87·8	87·2	86·5	86·2	84·1	83·5	83·9	85·5	14	45	91·8	6	0	79·9	6
87·1	87·1	86·6	86·9	83·2	82·8	82·6	82·5	82·5	84·7	13	13	88·8	6	0	81·9	7
87·4	86·7	85·0	83·7	82·8	81·9	81·5	81·5	80·7	83·0	14	16	89·6	23	32	79·9	8
87·0	86·9	84·1	82·5	81·2	81·0	80·5	80·2	80·2	82·4	14	2	88·0	5	45	78·4	9
88·2	87·0	85·5	83·0	83·4	81·0	82·2	81·6	81·2	82·9	14	5	88·7	2	12	78·4	10
90·2	88·7	87·0	86·5	86·1	84·9	83·9	83·5	84·0	84·7	13	40	91·4	5	8	79·3	11
91·6	91·3	89·4	87·5	86·5	85·5	84·9	84·5	84·0	86·1	15	40	92·2	4	40	80·5	12
89·5	88·2	87·2	86·8	85·9	84·5	84·5	83·5	83·8	84·9	13	54	90·6	4	49	80·2	13
89·2	88·0	86·0	84·2	83·5	82·9	82·5	82·0	81·6	84·6	14	42	90·6	6	18	80·5	14
88·7	87·4	85·5	83·7	83·0	82·5	82·1	81·6	81·4	83·6	13	42	89·2	6	12	79·4	15
84·3	87·0	81·2	83·1	82·5	82·4	81·8	81·5	81·4	83·3	17	50	89·0	4	50	79·2	16
86·6	85·5	84·0	82·5	82·0	81·5	81·4	81·4	82·1	83·1	13	28	87·6	5	10	79·7	17
85·5	84·9	83·5	82·9	83·0	82·3	81·7	81·5	81·1	82·9	13	41	88·5	5	56	79·5	18
86·7	85·6	84·0	82·3	81·6	81·4	81·0	80·6*	80·5	82·4	13	7	87·6	5	45	77·8	19
85·5	84·6	83·5	82·0	81·6	81·5	81·4	81·1	81·0	82·2	12	52	87·2	5	48	77·7	20
86·3	85·2	84·0	82·6	82·0	81·5	81·2	80·9	80·6	82·8	13	56	88·4	5	3	78·0	21
86·5	86·0	84·5	82·8	82·4	82·0	81·8	81·2	81·0	83·1	13	25	89·0	5	45	78·4	22
87·5	86·1	84·9	83·7	83·5	83·8	81·8	81·4	81·6	83·5	14	5	89·0	3	52	78·8	23
87·5	85·9	84·1	83·0	82·5	82·5	82·0	81·6	81·5	83·7	13	43	88·7	5	35	79·8	24
86·7	85·6	84·5	83·5	82·9	82·5	82·5	82·4	81·9	83·1	14	0	89·0	5	30	78·6	25
86·6	85·5	84·2	83·0	82·6	82·5	82·5	82·4	82·1	83·4	14	16	88·0	3	30	79·5	26
87·0	86·3	85·2	84·0	83·5	82·9	82·6	82·5	81·8	83·6	13	5	88·0	4	2	79·7	27
88·5	86·9	85·5	84·2	83·5	83·2	83·0	83·0	82·6	83·9	14	52	89·0	5	30	79·0	28
87·9	86·4	85·0	84·0	83·5	83·4	82·9	82·6	82·5	84·1	13	23	89·2	6	4	80·4	29
86·2	86·8	85·4	84·0	83·7	83·5	83·3	83·0	82·7	84·0	13	48	88·5	4	20	79·9	30
87·8	86·8	85·3	83·8	83·3	82·8	82·4	82·1	82·0	83·7							Mean.
+4·1	+3·1	+1·6	+0·1	−0·4	−0·9	−1·3	−1·6	−1·7								Variation.

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

MAY. (IN DEGREES FAHRENHEIT.)

Date.	Hours.																			
	0—1	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12	12—13	13—14	14—15	15—16	16—17	17—18	18—19	19—20
1	82·6	81·6	81·2	80·9	80·5	80·0	82·0	83·7	86·1	86·5	87·1	87·6	88·5	88·5	89·0	89·0	89·0	88·5	87·5	86·5
2	82·2	81·8	81·0	80·7	80·6	80·4	80·8	83·6	84·3	85·5	87·0	87·7	88·4	88·5	88·5	88·5	88·5	88·0	87·0	86·0
3	82·2	81·9	81·8	81·4	80·9	80·5	81·1	82·2	84·7	86·2	86·5	87·5	89·0	89·0	89·0	89·0	89·0	89·0	88·0	87·0
4	82·4	82·0	81·9	81·4	80·8	80·1	81·1	83·5	85·5	86·5	87·8	88·6	89·5	89·5	89·5	89·5	89·5	89·0	88·0	87·0
5	83·0	82·9	82·5	82·6	82·6	82·6	83·4	85·0	86·6	87·5	88·0	88·5	89·0	89·5	89·5	89·5	89·5	89·5	89·0	89·0
6	82·5	82·0	81·2	81·1	81·5	82·6	83·0	84·2	86·7	87·0	87·6	88·2	88·8	89·0	89·1	89·0	89·0	89·0	89·0	89·0
7	82·5	82·3	81·2	81·0	81·0	81·5	82·2	84·2	85·0	85·8	87·5	88·2	88·7	89·5	89·5	89·5	89·5	89·2	88·2	87·2
8	83·1	82·5	82·5	82·5	82·5	82·4	82·9	84·0	84·8	86·2	87·0	88·0	89·0	89·0	89·0	89·0	89·0	89·0	89·0	89·0
9	83·0	82·5	82·5	82·0	81·5	81·4	83·4	84·5	85·0	86·4	87·0	88·1	88·7	89·4	89·4	89·0	89·0	88·0	87·0	86·0
10	82·0	81·6	81·6	81·0	80·8	81·4	82·0	83·2	85·0	86·0	87·4	88·3	89·2	89·5	89·5	89·5	89·5	89·5	89·0	88·0
11	82·7	82·6	82·5	82·5	82·3	82·0	83·0	84·0	86·0	87·2	89·0	89·5	90·0	89·5	89·0	89·0	89·0	89·0	89·0	89·0
12	84·1	83·6	83·5	83·4	83·0	83·6	83·5	84·8	86·3	87·5	88·5	89·5	89·6	89·8	89·8	89·6	89·5	89·0	88·0	87·0
13	83·5	83·5	83·2	83·0	82·9	83·4	83·8	85·0	86·5	88·0	88·8	89·4	89·6	89·5	89·5	89·5	89·5	89·5	89·0	88·0
14	83·5	83·4	83·0	82·8	82·4	83·1	83·8	85·0	86·5	88·1	88·8	89·5	89·5	89·5	89·5	89·5	89·5	89·0	88·0	87·0
15	83·6	83·2	83·6	82·5	82·4	82·5	83·1	84·0	85·9	87·0	88·0	89·0	89·0	89·5	89·5	89·5	89·5	89·0	88·0	87·0
16	83·6	83·1	82·8	82·5	82·5	82·5	83·1	85·0	86·2	87·6	88·3	89·0	89·3	89·5	90·0	90·0	90·0	89·5	89·0	88·0
17	83·5	83·9	83·5	82·6	82·6	82·0	82·8	84·0	85·8	87·0	87·8	88·6	89·0	89·5	89·5	89·5	89·5	89·5	89·0	88·7
18	82·6	82·5	82·3	82·0	81·6	80·6	81·5	83·0	85·1	86·2	87·4	88·2	89·3	89·8	89·8	89·8	89·8	89·6	89·0	88·0
19	82·5	82·5	82·0	82·3	81·6	81·5	82·3	84·0	86·5	87·0	88·1	88·5	89·0	89·0	89·3	89·3	89·3	89·0	88·3	88·0
20	82·9	82·6	82·5	82·0	81·5	81·5	82·0	83·5	85·0	86·1	87·5	88·5	89·5	90·0	89·0	89·0	89·0	89·0	88·0	88·8
21	83·6	83·4	83·3	83·5	83·6	83·0	83·8	85·1	86·4	88·0	89·5	90·5	90·5	90·5	90·5	90·5	90·6	90·0	89·0	90·6
22	82·8	82·6	83·0	83·2	82·8	83·4	83·5	84·0	86·2	87·2	88·5	88·8	89·5	89·0	89·0	89·0	89·0	89·0	89·0	89·0
23	81·1	81·2	81·5	81·6	82·8	82·0	82·2	85·1	84·8	86·0	87·1	88·5	88·8	89·0	89·0	89·0	89·0	89·0	89·0	89·0
24	83·5	83·5	83·0	83·0	82·5	82·8	83·5	84·8	86·1	87·4	88·5	88·8	89·5	89·5	89·5	89·5	89·5	89·5	89·8	89·8
25	83·5	83·2	82·6	82·5	82·5	82·5	83·0	84·0	85·7	87·0	88·2	89·2	89·5	89·5	89·5	89·5	89·5	89·5	90·0	90·0
26	83·8	83·8	83·6	83·5	83·6	83·6	83·9	85·2	87·1	88·1	89·0	89·8	90·5	90·5	90·5	90·5	90·5	90·5	90·2	90·2
27	84·0	84·3	83·8	83·5	83·5	83·5	84·2	84·5	87·0	88·5	89·2	89·5	89·5	89·5	89·5	89·5	89·5	89·5	89·5	89·6
28	84·5	84·4	84·2	84·0	83·5	83·8	84·5	85·5	87·0	88·0	88·5	89·0	90·5	90·5	90·5	90·5	90·5	90·5	90·0	90·0
29	84·2	84·0	83·5	83·6	83·5	83·5	84·0	85·0	86·2	87·8	88·8	89·4	90·0	91·0	91·0	91·0	91·0	91·0	91·0	91·4
30	84·5	84·3	84·2	84·0	83·6	83·5	84·5	85·6	86·8	88·0	89·4	90·2	90·6	91·2	91·2	91·5	91·5	91·5	91·5	91·5
31	84·6	84·5	84·5	84·4	84·3	84·3	84·5	86·0	87·2	88·7	89·6	90·2	91·0	91·0	91·0	91·0	91·0	91·0	91·0	91·0
Mean	83·2	83·0	82·6	82·5	82·3	82·3	83·0	84·5	85·9	87·2	88·1	88·9	89·5	89·7	89·7	89·7	89·7	89·4	88·7	88·1
Variation	—3·4	+2·6	—3·0	—3·1	—3·3	—3·3	—2·6	—1·1	+0·3	+1·6	+2·5	+3·3	+3·9	+4·1	+4·1	+4·2	+4·2	+3·9	+3·2	+2·6

JUNE,

1	84·5	84·2	83·9	83·6	83·5	83·1	83·9	85·2	87·0	87·4	88·5	89·5	90·6	91·3	91·1	91·0	91·0	91·0	91·0	91·0
2	84·5	84·3	83·9	83·5	83·4	83·0	84·0	85·1	86·7	87·1	89·0	90·0	90·6	90·8	91·4	91·4	91·4	91·4	91·4	91·4
3	84·5	84·2	84·3	84·1	84·0	83·8	84·2	85·6	86·7	89·1	89·6	90·6	90·7	91·0	91·0	91·0	91·0	91·0	91·0	91·0
4	85·5	85·4	85·1	84·8	84·6	84·5	85·2	86·2	87·4	88·3	89·5	90·0	90·8	91·6	91·7	91·6	91·6	91·6	91·6	91·6
5	85·8	85·6	85·5	85·6	85·4	85·2	85·8	87·2	87·6	87·5	88·2	89·5	90·0	90·4	89·8	89·8	89·8	89·8	89·8	89·8
6	85·6	85·2	85·0	84·8	84·6	84·5	85·1	86·2	88·7	88·8	89·4	89·4	89·3	89·5	91·2	91·5	91·5	91·5	91·2	91·2
7	85·8	85·5	85·3	85·0	84·8	84·6	85·2	86·3	88·0	89·1	90·0	91·0	91·0	92·0	92·5	92·5	92·5	92·5	92·5	92·5
8	84·3	84·6	84·5	84·4	84·4	84·5	84·8	86·0	87·2	87·1	89·5	90·1	91·0	89·8	91·5	91·5	91·5	91·5	91·5	91·5
9	85·0	85·0	85·0	84·8	84·8	84·5	85·2	86·3	88·0	89·0	90·0	91·4	91·5	92·0	92·0	92·0	92·0	92·0	92·0	92·0
10	85·5	85·4	85·7	85·0	85·3	85·0	79·8	79·6	79·0	79·5	81·6	81·8	80·5	81·3	80·0	80·0	80·0	80·0	80·0	80·0
11	81·5	81·5	81·5	81·5	81·5	79·1	79·4	80·5	81·7	82·7	83·2	81·7	79·6	78·0	78·9	78·9	78·9	78·9	78·9	78·9
12	82·8	79·1	78·2	78·2	78·2	78·0	79·2	79·6	78·3	79·2	79·2	80·5	81·2	79·8	78·6	78·6	78·6	78·6	78·6	78·6
13	78·1	78·4	77·9	77·1	77·5	77·1	76·9	77·2	77·9	78·1	78·5	79·4	79·5	79·6	79·7	79·7	79·7	79·7	79·7	79·7
14	80·0	80·0	80·5	81·5	82·4	82·5	83·0	83·5	84·9	85·4	86·5	86·9	87·5	87·6	86·9	86·9	86·9	86·9	86·9	86·9
15	84·1	83·8	83·5	83·5	83·5	83·5	83·7	83·9	85·1	86·0	87·1	87·7	87·9	88·0	88·0	88·0	88·0	88·0	88·0	87·7
16	84·0	83·9	83·6	83·4	83·4	83·2	83·5	84·3	84·3	81·7	85·0	85·7	88·1	86·6	85·7	85·7	85·7	85·7	85·7	85·7
17	83·4	83·3	83·3	83·0	83·0	82·8	83·2	84·0	84·9	85·2	85·5	86·8	87·0	87·0	87·5	87·5	87·5	87·5	87·5	87·3
18	83·1	83·0	82·8	82·6	82·5	82·5	82·8	83·2	84·7	86·4	86·0	87·2	86·0	87·5	86·8	86·8	86·8	86·8	86·8	86·8
19	82·0	81·3	81·8	81·8	81·6	81·3	81·8	83·0	84·3	85·2	86·0	88·5	85·9	86·0	85·4	85·4	85·4	85·4	85·4	85·4
20	79·9	80·5	80·6	80·7	80·4	80·5	80·7	80·2	79·3	78·3	76·2	77·9	78·2	78·2	78·5	78·5	78·5	78·5	78·5	78·5
21	78·6	78·6	78·5	78·5	78·6	78·5	79·0	80·6	81·5	83·1	84·1	84·2	82·7	83·7	84·5	84·5	84·5	84·5	84·5	84·5
22	81·2	80·8	80·9	81·0	81·0	80·5	79·9	79·5	80·1	82·8	84·5	84·6	84·4	84·7	84·4	84·7	84·4	84·7	84·4	84·7
23	80·8	81·0	81·5	80·9	81·4	80·6	80·1	80·6	82·3	84·2	84·0	84·4	84·7	85·1	84·6	84·6	84·6	84·6	84·6	84·6
24	85·4	82·3	82·1	80·8	80·9	81·7	82·4	82·5	83·8	84·8	85·5	85·8	85·9	85·5	85·3	85·3	85·3	85·3	85·3	85·3
25	81·7	79·7	80·6	79·2	79·9	80·2	80·1	81·1	82·5	82·2	83·0	82·4	82·7	83·3	83·3	83·3	83·3	83·3	83·3	83·3
26	83·2	80·9	79·5	79·0	79·9	79·2	79·9	80·6	81·7	83·0	83·9	83·5	86·1	87·1	87·1	87·1	87·1	87·1	87·1	87·1
27	87·3	82·4	82·2	82·1	81·8	81·6	82·0	83·2	84·4	84·8	86·0	86·5	86·0	87·2	87·3	87·3	87·3	87·3	87·3	87·3
28	83·2	83·0	82·9	82·0	82·9	82·8	81·3	80·2	81·0	82·2	83·4	84·9	85·1	80·4	85·4	85·4	85·4	85·4	85·4	85·4
29	82·9	82·9	82·9	82·9	80·8	79·6	78·8	79·5	80·1	81·1	77·9	77·2	77·5	77·7	78·1	78·1	78·1	78·1	78·1	78·1
30	79·4	79·1	78·8	78·2	78·3	77·0	78·8	79·8	81·0	82·1	82·3	83·2	82·0	80·4	80·4	80·4	80·4	80·4	80·4	80·4
Mean	82·8	82·5	82·3	82·0	91·9	81·7	81·9	82·6	83·6	84·2	85·0	85·7	85·8	85·9	86·1	86·1	86·1	86·1	86·1	86·1
Variation	—0·9	—1·2	—1·4	—1·7	—1·8	—2·0	—1·8	—1·1	—0·1	+0·5	+1·3	+2·0	+2·1	+2·2	+2·4	+2·4	+2·4	+2·4	+2·4	+2·4

MAY.

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)
(IN DEGREES FAHRENHEIT.)

Hours.											Mean.	Maximum.		Minimum.		Date.
16–16	16–17	17–18	18–19	19–20	20–21	21–22	22–23	23–24				Time.	Mag.	Time.	Mag.	
												H. M.		H. M.		
88·5	87·5	86·4	84·6	84·0	83·3	82·6	82·5	82·5	84·5	13	10	89·0	5	0	80·2	1
88·4	87·9	86·2	84·3	83·6	83·4	82·0	82·5	82·5	84·3	14	5	88·9	6	28	80·0	2
88·1	86·9	85·5	84·6	84·2	84·0	83·7	83·5	83·6	84·5	12	40	89·6	5	40	80·4	3
89·3	88·5	87·0	85·4	85·3	84·8	84·5	84·1	83·4	85·2	14	5	90·4	6	0	80·5	4
90·0	88·2	86·8	84·8	84·0	83·5	83·4	83·1	82·8	85·4	14	30	90·1	4	40	82·4	5
88·8	87·8	86·5	85·0	84·4	84·1	83·6	83·2	82·6	84·9	14	55	89·5	3	50	80·6	6
89·2	88·0	87·0	85·0	84·1	83·8	83·5	83·4	83·3	84·9	14	10	89·6	4	15	80·6	7
89·5	89·0	87·4	85·5	84·8	84·0	83·8	83·6	83·5	85·3	14	45	90·0	6	0	82·2	8
88·9	88·5	86·8	86·0	84·5	84·0	83·8	83·5	83·1	85·1	13	55	89·5	5	35	81·3	9
89·5	88·8	87·2	85·9	86·0	84·5	84·4	84·0	83·5	85·1	14	30	90·2	6	0	80·7	10
89·5	88·8	87·5	86·0	85·4	85·1	84·8	84·6	84·5	85·8	13	15	90·2	5	0	81·9	11
89·8	88·2	87·5	86·0	85·5	85·0	84·6	83·5	83·2	86·0	15	40	90·1	6	0	82·9	12
89·0	88·5	86·9	85·5	85·0	84·6	84·5	84·1	83·8	85·9	15	10	90·0	4	45	82·9	13
89·1	88·9	87·0	85·5	85·0	84·5	84·2	84·0	83·5	85·8	13	40	89·9	5	35	82·3	14
89·5	88·7	87·2	85·8	84·8	84·5	84·0	84·0	83·8	85·6	14	15	90·0	6	0	82·3	15
89·8	88·3	87·2	85·8	85·0	84·5	84·1	84·0	83·8	85·7	14	15	90·5	6	0	82·4	16
89·5	88·6	87·0	85·0	84·5	84·0	83·6	83·6	83·5	85·4	14	5	90·0	5	45	81·9	17
89·5	88·0	86·4	84·8	84·3	83·5	82·5	83·4	83·0	85·0	13	55	90·0	5	50	80·4	18
88·5	87·5	86·1	84·5	83·6	83·5	83·4	82·6	82·6	84·9	13	30	89·5	5	10	81·3	19
88·6	87·8	86·6	85·0	84·5	84·1	84·0	83·6	83·5	85·3	14	0	90·1	5	20	81·4	20
90·0	88·5	86·6	84·8	84·0	83·5	83·4	83·1	83·0	85·9	14	25	90·7	5	23	82·7	21
88·9	87·6	86·0	84·5	85·0	83·5	83·2	83·1	82·9	85·3	14	0	89·5	4	23	82·9	22
89·4	88·8	87·2	85·8	85·2	84·8	84·5	84·0	83·6	85·1	14	55	90·0	6	30	81·0	23
89·2	88·8	87·8	86·1	85·5	84·9	84·5	84·5	84·0	85·9	14	40	90·0	5	50	82·7	24
89·8	88·9	87·3	86·0	85·5	84·9	84·6	84·5	84·2	85·8	14	50	90·5	5	15	82·4	25
90·3	89·2	88·0	86·2	85·5	85·0	84·8	84·5	84·4	86·4	13	50	91·0	5	30	82·0	26
90·4	89·5	88·0	86·0	85·5	85·0	84·6	84·5	84·5	86·6	12	0	91·0	6	0	83·4	27
90·5	89·5	88·0	86·2	85·5	85·0	84·5	84·5	84·5	86·5	15	35	90·6	6	0	83·5	28
91·0	90·2	88·5	87·0	86·6	85·8	85·6	85·5	85·0	86·7	15	0	91·6	6	0	83·4	29
91·2	90·0	88·8	87·0	86·5	85·8	85·6	85·5	85·0	87·3	14	20	92·2	5	30	83·4	30
90·5	89·5	88·0	86·2	85·5	85·4	85·3	84·9	84·6	86·9	14	30	91·5	6	30	84·0	31
89·5	88·5	87·1	85·5	84·9	84·4	84·1	83·9	83·6	85·6							Mean.
+3·9	+2·9	+1·5	−0·1	−0·7	−1·2	−1·5	−1·7	−2·0								Variation.

JUNE.

90·9	89·2	87·5	86·2	85·6	85·4	85·3	84·7	84·5	86·5	15	15	91·5	6	0	82·6	1
90·3	89·1	87·6	86·1	85·4	85·3	85·0	84·9	84·6	86·4	14	35	91·5	6	30	82·9	2
90·3	90·0	88·4	87·2	86·0	85·8	85·6	85·4	85·5	86·9	14	40	91·5	5	55	82·8	3
91·4	91·4	89·2	88·0	87·5	87·2	86·8	86·5	86·2	87·7	14	0	92·0	6	0	84·4	4
90·2	89·5	88·5	87·5	86·8	86·5	86·1	86·0	85·8	87·3	15	45	90·6	5	50	85·0	5
91·1	90·6	89·0	87·8	87·2	86·9	86·6	86·5	86·1	87·7	14	50	91·5	4	50	84·3	6
92·1	91·0	89·8	88·2	87·5	86·4	86·5	86·2	84·2	87·9	14	15	92·6	5	40	84·1	7
91·5	90·5	89·3	87·8	87·2	86·6	86·2	86·2	85·1	87·2	14	50	91·6	3	45	83·5	8
90·7	88·7	88·0	86·8	86·6	86·5	86·3	86·1	85·8	87·4	13	20	92·6	5	20	84·4	9
84·5	84·5	83·6	82·4	82·4	81·6	80·9	82·0	82·0	82·1	0	15	86·7	6	46	78·1	10
79·4	80·1	81·1	81·5	82·0	82·5	82·6	82·8	83·0	81·2	9	40	83·6	13	42	77·6	11
78·3	79·3	78·9	78·9	78·6	78·8	78·5	78·1	78·3	79·1	0	10	83·1	5	15	77·6	12
79·6	79·6	79·4	79·0	78·9	79·1	79·3	79·6	80·0	78·6	14	50	80·1	6	50	76·5	13
87·2	86·5	84·8	84·0	84·6	84·5	84·5	84·4	84·2	84·4	12	45	88·4	2	15	79·9	14
87·6	86·7	86·1	85·1	84·8	84·2	84·5	84·5	84·3	85·3	12	10	88·1	7	38	83·0	15
84·7	85·8	85·0	84·6	84·2	84·2	83·8	83·8	83·3	84·3	13	43	86·9	9	10	79·7	16
87·5	87·0	85·8	84·6	84·3	84·1	83·8	83·5	83·4	84·7	13	50	87·8	5	10	82·7	17
87·0	86·7	85·4	84·0	83·2	81·5	80·9	82·0	82·5	84·2	11	32	87·7	20	10	79·9	18
88·2	84·6	83·8	82·7	82·4	82·2	81·4	81·0	80·2	83·2	12	10	88·8	23	56	80·1	19
79·0	79·4	79·7	79·0	78·6	79·0	79·0	79·2	79·0	79·2	7	0	81·0	10	35	76·0	20
85·0	84·8	84·4	83·0	83·5	83·2	83·2	81·3	81·5	81·8	15	20	85·1	5	25	78·4	21
82·9	82·9	82·9	82·9	82·3	82·1	82·0	82·0	81·6	82·1	11	10	86·1	6	30	78·2	22
85·1	85·0	83·2	82·8	82·6	82·6	82·5	82·5	82·6	82·7	15	30	85·6	6	20	79·9	23
85·6	82·1	82·7	82·9	79·9	80·6	81·0	81·4	81·5	82·0	13	13	87·5	19	10	79·5	24
83·4	82·0	82·1	81·8	81·9	82·1	82·6	82·8	82·6	81·8	15	0	85·3	1	10	78·6	25
87·5	86·0	85·4	84·4	83·8	83·6	83·4	83·1	82·6	83·0	15	20	87·9	3	40	78·7	26
86·8	85·2	84·6	84·4	84·2	84·0	83·8	83·6	83·4	84·2	15	10	87·6	5	10	81·3	27
85·5	84·3	84·0	83·5	83·0	82·8	82·9	83·0	83·0	83·3	13	38	86·6	7	34	80·1	28
78·2	78·6	73·4	78·2	78·0	78·4	79·2	79·2	79·3	79·5	0	0	83·0	10	40	78·4	29
81·0	80·8	80·4	80·3	80·5	80·9	81·4	82·1	82·5	80·1	11	40	84·3	3	30	74·9	30
86·0	85·4	84·6	83·9	83·5	83·3	83·2	83·1	82·9	83·7							Mean.
+2·3	+1·7	+0·9	+0·2	−0·2	−0·4	−0·5	−0·6	−0·8								Variation.

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

JULY. (IN DEGREES FAHR ENHEIT.)

Date.	Hours.																			
	0—1	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12	12—13	13—14	14—15	15—16	16—17	17—18	18—19	19—20
1	82·2	81·3	82·1	82·1	82·2	80·6	81·8	82·7	83·7	84·4	85·0	85·3	85·8	86·8	86·9	86·9	86·8	86·4	85·8	85·2
2	83·8	82·7	82·8	82·7	82·5	82·3	80·6	81·8	78·9	80·5	81·6	80·7	79·4	78·2	79·4	79·6	79·6	79·4	79·2	79·0
3	77·7	78·0	78·1	78·5	78·4	78·2	78·3	77·6	77·0	77·1	77·5	78·0	78·8	79·5	79·6	79·6	79·6	79·6	79·6	79·6
4	78·2	78·4	78·7	78·5	78·8	78·4	78·9	79·2	78·6	78·0	78·4	79·6	79·6	79·6	80·0	80·0	80·0	80·0	80·0	80·0
5	78·2	78·8	79·3	79·5	79·4	79·8	81·0	81·1	82·0	82·7	83·1	83·8	84·1	83·8	82·5	82·5	82·5	82·5	82·5	82·5
6	81·4	81·4	81·3	81·1	81·3	81·1	81·2	82·4	83·5	84·6	85·0	85·5	86·0	86·2	86·2	86·2	86·2	86·2	86·2	86·2
7	81·9	81·8	81·5	81·1	81·1	81·1	81·2	82·3	83·6	84·5	85·2	85·9	86·1	86·5	86·1	86·5	86·3	86·5	86·5	86·5
8	82·1	81·8	81·5	81·5	81·1	80·9	81·0	82·1	83·2	84·5	84·7	85·3	86·7	87·0	86·5	86·5	86·5	86·5	86·5	86·5
9	82·4	82·2	82·3	82·5	82·1	82·0	82·0	82·7	83·6	84·8	84·9	85·8	86·4	86·6	86·5	86·5	86·4	86·5	86·5	86·5
10	82·6	82·6	82·2	81·9	81·7	81·2	81·4	82·2	83·1	83·8	83·8	84·8	85·5	86·1	86·2	86·2	86·2	86·2	86·2	86·2
11	81·1	81·0	80·6	79·7	79·2	79·2	79·7	80·5	81·5	81·4	81·7	81·2	81·2	81·3	80·7	80·7	80·7	80·7	80·7	80·7
12	80·1	79·7	79·9	79·6	79·7	80·2	80·3	79·7	78·5	77·1	76·5	77·6	78·1	78·1	78·6	78·6	78·6	78·6	78·6	78·6
13	80·3	80·5	80·5	80·5	80·7	80·9	81·0	81·9	82·0	82·4	83·0	84·2	84·7	85·7	85·7	85·7	85·7	85·7	85·7	85·7
14	82·4	82·1	81·8	80·3	80·7	81·1	81·6	82·2	83·4	84·4	85·6	86·2	86·8	86·9	86·9	86·9	86·9	86·9	86·9	86·9
15	82·2	82·0	81·9	81·8	81·0	81·2	81·7	82·4	83·1	81·5	85·6	86·4	86·6	86·6	87·1	87·2	87·2	87·2	87·2	87·2
16	82·2	82·0	80·3	80·7	80·2	80·9	81·6	82·2	83·0	84·2	83·3	84·5	85·0	85·6	85·3	85·3	85·3	85·3	85·3	85·3
17	81·0	81·9	81·6	81·4	81·1	81·3	80·7	82·0	83·2	83·0	84·9	84·8	84·6	84·6	84·7	83·4	83·4	83·4	83·4	83·4
18	80·4	80·6	79·7	78·9	79·6	79·0	79·4	79·0	78·8	78·1	79·0	78·7	77·7	78·0	78·5	78·5	78·5	78·5	78·5	78·5
19	78·8	78·4	78·6	78·4	77·9	77·7	77·6	78·0	78·2	78·5	77·8	76·5	77·3	78·1	79·7	79·7	79·7	79·7	79·7	79·7
20	79·9	80·2	79·4	78·7	78·3	77·9	78·2	78·3	80·0	79·9	79·4	79·7	79·7	79·7	79·0	79·0	79·0	79·0	79·0	79·0
21	79·5	79·0	79·1	79·5	79·4	77·8	78·0	77·9	78·6	79·5	80·6	81·2	80·5	80·7	81·2	81·2	81·2	81·2	81·2	81·2
22	79·8	79·0	80·4	80·3	80·1	80·3	80·1	81·2	82·1	82·9	84·1	84·5	84·5	84·5	82·9	82·9	82·9	82·9	82·9	82·9
23	80·5	80·1	79·3	80·1	79·5	79·4	80·6	80·9	81·6	81·7	83·1	82·9	81·0	82·8	83·0	83·0	83·0	83·0	83·0	83·0
24	80·1	80·0	80·1	79·6	78·2	77·4	78·3	78·5	78·7	80·3	78·5	79·0	81·6	82·3	82·2	82·2	82·2	82·2	82·2	82·2
25	79·4	79·8	79·6	79·9	79·9	79·7	79·9	80·6	81·0	81·4	82·2	82·8	83·2	82·6	82·6	82·6	82·6	82·6	82·6	82·6
26	79·6	80·0	80·1	80·4	80·5	80·4	80·1	80·6	80·8	79·1	79·0	79·1	79·1	79·1	79·1	79·1	79·1	79·1	79·1	79·1
27	80·4	80·5	80·4	80·0	80·1	80·2	80·3	80·3	80·2	80·7	80·9	82·0	81·5	79·9	79·2	79·2	79·2	79·2	79·2	79·2
28	77·5	78·0	79·4	79·6	79·6	79·7	79·4	79·2	80·7	80·9	80·4	81·1	81·8	81·8	81·8	81·8	81·8	81·8	81·8	81·8
29	79·1	79·1	78·9	78·9	79·3	79·3	79·8	79·0	80·1	81·0	82·1	81·5	82·2	83·6	83·6	83·6	83·6	83·6	83·6	83·6
30	79·0	79·0	79·4	79·4	79·5	79·3	79·3	79·6	80·6	81·4	82·1	82·4	82·7	83·7	83·7	83·7	83·7	83·7	83·7	83·7
31	80·4	80·4	80·4	80·2	80·3	80·3	80·0	80·7	81·4	82·5	82·4	82·7	81·5	83·3	83·6	83·6	83·6	83·6	83·6	83·6
Mean . .	80·5	80·4	80·4	80·2	80·1	80·0	80·2	80·6	81·1	81·6	82·0	82·4	82·6	82·9	82·8	82·8	82·8	82·8	82·8	82·8
Variation. .	—0·7	—0·8	—0·8	—1·0	—1·1	—1·2	—1·0	—0·6	—0·1	+0·4	+0·8	+1·2	+1·4	+1·7	+1·6	+1·6	+1·6	+1·6	+1·6	+1·6

AUGUST.

1	80·7	80·4	80·5	80·4	80·2	80·4	80·4	80·9	81·5	81·6	82·0	81·7	81·8	83·2	80·8	80·8	80·8	80·8	80·8	80·8
2	80·6	80·6	80·6	80·5	80·8	80·4	80·7	81·2	82·3	82·4	83·5	84·0	83·3	83·2	83·2	83·2	83·2	83·2	83·2	83·2
3	80·3	80·0	79·7	80·3	80·3	79·7	79·2	80·0	81·1	81·6	82·5	81·9	82·0	82·3	82·5	82·5	82·5	82·5	82·5	82·5
4	78·8	78·9	79·6	79·5	80·0	79·7	79·8	80·4	81·6	82·9	83·5	83·9	83·3	83·3	84·1	85·1	85·1	85·1	85·1	85·1
5	80·5	80·4	79·6	79·7	79·7	80·0	80·4	81·1	82·3	83·5	84·1	84·5	85·0	85·0	85·0	85·0	84·8	84·8	84·8	84·8
6	80·1	80·0	80·0	80·2	79·6	79·5	80·0	80·5	82·2	82·5	84·5	84·5	85·0	85·0	85·0	85·0	85·0	85·0	85·0	85·4
7	80·4	80·4	80·3	80·0	79·6	79·0	79·2	79·9	81·4	82·3	83·2	84·4	85·0	85·0	85·0	85·2	85·2	85·2	85·2	85·2
8	79·6	79·5	79·8	79·8	79·5	79·4	79·8	80·2	80·0	81·9	81·0	82·9	82·4	83·5	84·4					
9	78·8	79·5	79·5	79·6	80·2	79·9	80·5	80·6	81·5	82·2	83·0	83·3	83·3	84·2	84·2					
10	80·2	80·5	80·5	80·5	80·5	80·5	80·6	81·0	81·3	82·0	82·9	83·4	84·0	83·6	84·1					
11	80·4	80·4	80·1	79·8	79·8	79·8	80·4	81·0	82·1	82·1	83·4	84·0	84·8	85·1	85·1					
12	80·5	80·1	80·5	80·5	79·1	79·2	78·5	79·6	77·7	79·5	82·3	83·2	84·0	84·4	84·6					
13	80·5	80·5	79·3	79·5	79·3	78·5	77·8	79·0	78·8	81·1	81·9	83·2	84·1	84·5	83·8					
14	80·2	80·2	79·4	79·5	79·6	79·4	80·1	80·0	81·8	81·7	82·1	82·6	83·0	83·5	83·9					
15	80·1	80·5	80·5	80·5	80·1	80·5	81·6	82·0	82·7	83·8	84·5	84·5	84·5	84·6	84·8					
16	81·0	80·7	80·2	79·7	78·2	78·1	77·2	77·0	79·6	81·0	82·6	83·0	83·2	83·0	82·3					
17	79·6	79·6	79·5	79·5	79·5	78·0	76·8	78·8	80·2	81·5	82·5	84·2	84·3	83·8	84·3					
18	80·0	80·0	80·0	80·0	79·6	79·5	79·6	80·1	82·1	82·6	82·9	83·1	83·3	83·2	82·0					
19	80·0	79·9	79·8	79·9	79·5	79·5	80·0	81·0	82·0	83·1	84·2	84·6	85·0	84·8	85·5					
20	80·5	80·2	80·1	79·9	79·7	79·7	80·2	81·0	82·0	83·2	83·0	83·0	84·7	84·5	82·2					
21	80·6	80·6	79·8	80·0	78·4	79·0	80·0	80·7	82·0	83·1	83·9	84·9	85·0	85·5	85·6					
22	79·6	79·2	79·8	79·4	79·4	79·1	79·6	80·0	80·7	81·0	82·1	83·2	83·5	83·5	82·0					
23	79·8	79·5	79·6	79·6	79·5	79·5	79·4	81·1	82·0	83·1	83·6	83·4	83·2	82·6	83·5					
24	79·6	79·4	79·1	79·1	79·1	79·0	79·5	79·5	81·2	80·8	79·4	79·5	80·0	81·0	80·7					
25	80·5	80·4	80·5	80·2	80·5	80·5	80·5	80·3	79·8	80·6	77·8	78·1	78·0	79·5	79·5					
26	78·4	78·2	77·6	77·0	76·1	76·8	75·0	75·5	78·0	76·6	76·9	75·2	75·0	74·6	74·8					
27	77·1	77·6	78·0	76·5	77·4	77·5	78·0	78·4	77·9	76·5	77·5	77·8	78·0	77·2	76·4					
28	77·5	77·6	77·1	76·6	76·5	76·6	77·0	76·2	77·1	77·5	77·8	78·0	76·5	76·5	77·0					
29	77·5	77·8	78·0	77·2	77·0	77·7	78·1	78·1	78·2	78·6	78·7	78·4	78·0	78·1	77·8					
30	78·4	78·2	78·0	77·0	77·5	77·8	78·5	78·9	79·0	79·1	79·0	79·1	78·1	80·0	80·5					
31	77·0	78·1	78·5	78·5	78·5	77·0	77·2	78·1	80·9	80·6	81·6	82·5	83·2	82·9	82·1					
Mean . .	79·6	79·6	79·5	79·4	79·2	79·1	79·2	79·7	80·5	81·2	81·8	82·2	82·4	82·6	82·5					
Variation. .	—0·9	—0·9	—1·0	—1·1	—1·3	—1·4	—1·3	—0·8	0·0	+0·7	+1·3	+1·7	+1·9	+2·1	+2·0					

JULY.

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)
(IN DEGREES FAHRENHEIT.)

Hours.										Mean.	Maximum.		Minimum.		Date.
15—16	16—17	17—18	18—19	19—20	20—21	21—22	22—23	23—24			Time.	Mag.	Time.	Mag.	
											H. M.		H. M.		
88·8	85·6	84·9	83·1	81·5	83·2	83·5	81·3	82·4		83·6	15 45	87·2	5 30	79·3	1
79·8	78·7	79·4	79·3	79·0	78·2	77·5	77·1	77·2		80 1	2 0	82·9	22 42	77·0	2
79·6	79·5	78·5	78·0	78·4	77·7	78·0	78·2	78·1		78·3	14 18	79·9	3 30	76·5	3
79·9	80·4	79·7	79·0	79·2	79·0	78·2	78·9	78·5		79·0	16 40	80·5	9 52	77·4	4
80·4	81·2	82·3	82·5	82·4	81·0	81·7	82·0	81·9		81·4	14 0	84·7	0 51	78·0	5
85 7	85·5	84·8	83·9	83·2	82·8	82·4	82·2	82·1		83·4	13 3	86·6	2 26	81·0	6
86·5	86 0	85·1	84·1	83·5	83·0	82·9	82·6	82·5		83·6	13 29	86·7	4 0	81·0	7
86·0	86·4	85·7	84·4	83·7	83 5	83·1	82·9	82·7		83·7	13 38	87·4	6 0	80·5	8
86·7	86·4	85·2	84·8	84·1	83·4	83·4	83·1	82·9		84·0	15 33	87·1	6 37	81·8	9
86 3	84·2	83·8	83·0	82·5	81·8	81·5	81·1	81·1		83·0	14 28	86·3	22 3	80·5	10
80·8	81·2	81·2	81·1	81·1	81·4	81·2	80·7	80·5		80·8	10 45	82·3	6 3	79·1	11
78·1	78·9	79·6	79·2	79·3	79·2	79·4	79·5	79·6		79·0	6 27	80·5	10 15	76·2	12
85·8	84 9	83·8	83·2	83 0	82·9	82·6	82·6	82·5		82·8	14 18	86·7	0 13	79·9	13
85·9	85·2	84·1	83·6	83·0	83·0	82·9	82·7	82·5		83·5	13 2	87·4	4 5	80·2	14
87·2	85·7	83·9	83·4	83·0	82·8	82 7	82·5	82·4		83·7	15 30	87·6	4 3	80·4	15
84·5	84·8	83·8	80·8	81·3	81·5	82·0	82·2	82·0		82·7	14 24	86·3	4 15	79·4	16
83·7	82·3	80·2	79·9	80·6	81·2	80·1	80·6	80·5		82·1	10 40	85·5	17 57	78·5	17
78·2	78·1	79·4	78·0	78·9	79·5	79·9	79·4	79·8		79·0	2 10	80·7	15 45	77·0	18
79·8	80·2	80·0	79·7	79 6	78·9	78·9	78 9	80·0		78·7	17 38	81·0	11 25	76·1	19
79·5	80·4	80·0	80·0	80·0	79·9	77·7	77·6	78·1		79·2	2 13	80·7	22 3	76·4	20
81 6	78·4	78·9	78·6	78·8	79·3	79·8	80·6	78·8		79·5	15 46	81·7	5 31	76·8	21
82·5	81 6	80·4	79 1	80·0	80·2	80·8	80·4	80·6		81·2	13 15	84·3	1 22	78·5	22
83·3	82·5	81·5	81·4	80·9	80·8	80·7	80·8	80·6		81·2	11 20	84·2	5	78·1	23
81·9	81·6	81·0	80·2	79·9	78·8	78·0	78·1	78·7		79 7	13 8	82·6	5 20	76·6	24
81·8	81·6	81·5	81·2	81·0	81·0	80·9	80·4	80·2		81·0	12 55	83·7	4 45	79·2	25
80·2	80·4	80·3	80·4	80·5	80·2	80·2	80·5	80·3		80·1	13 13	82·0	10 55	77·4	26
80·1	79·9	79·6	80·2	80·4	80·6	80·6	80·4	79·6		80·3	12 0	82·4	9 50	79·0	27
82·2	82·6	81·7	81·2	81·1	81·0	80·9	80·4	80·2		80·5	15 53	82·9	0 15	76·5	28
82·0	82·5	81·6	81·0	80·9	80·4	80·5	79·1	79·6		80·6	11 20	83·5	2 42	77·6	29
83·9	80·8	81·0	80·9	80·9	80·8	79·6	80·0	80·1		80·8	12 8	84·4	0 40	78·0	30
83·4	82·5	82·0	81·6	81·2	81·0	81·1	81·2	80·8		81·5	14 30	84·0	6 6	79·1	31
82·6	82·3	81·8	81·2	81·1	80·9	80·7	80·3	80·5		81·2					Mean.
+1·4	+1·1	+0·6	0·0	—0·1	—0·3	—0·5	—0·8	—0·7							Variation.

AUGUST.

80·9	81·5	81·5	81·4	81·3	80·8	80·0	80·6	80·0	81·1	14 5	83·7	14 32	79·4	1
84·1	83·5	82·6	81·3	81·1	80·6	80·6	80·5	79·6	81·8	15 27	84·5	23 52	79·5	2
83·2	82·5	81·8	80·9	79·8	80·6	80·2	80·0	80·0	80·9	15 20	83·6	6 45	78·0	3
84·8	83·0	82·5	81·9	81·5	81·4	81·3	80·5	80·5	81·6	14 55	85·5	24 40	78·0	4
84·9	84·0	82·9	81·6	81·2	81·0	80·5	80·5	80·5	82·0	13 0	85·5	3 45	79·4	5
84·8	83·8	82·2	81·8	81·5	81·0	81·0	80·8	80·9	82·0	14 40	85·5	4 10	79·4	6
84·5	83·8	82·8	82·1	81·4	80·8	80·8	81·0	80·5	81 9	13 35	85·5	5 0	78·5	7
84·4	83·0	82·5	80·5	80·3	77·6	77·5	78·9	79·5	80·7	15 32	84·5	5 50	77·5	8
81·6	81·0	80·1	80·5	80·3	80·6	79·5	80·0	80·1	81·0	12 45	84·5	0 26	78·7	9
83·8	80·6	82·6	82·0	81·5	81·5	81·2	80·0	80·2	81·8	14 50	84·5	22 38	79·6	10
84·3	83·6	81·8	81·5	81·2	81·4	81·3	80·8	80·4	81·7	13 45	85·5	20 15	78·6	11
83·3	82·0	81·8	80·8	81·0	80·6	80·7	80·8	80·5	80·1	14 50	85·5	6 0	77·2	12
85·2	83·5	82·0	79·4	80·0	78·8	79·8	80·1	80·2	80·8	14 10	85·0	6 0*	76·5	13
83·8	83·2	82·3	81·5	81·5	81·4	81·3	80·0	80·0	81·3	15 30	84·0	2 15	78·3	14
84·5	84·0	84·0	82·1	81·6	81·5	81·3	81·4	81·5	82·2	14 10	85·5	5 30	80·0	15
81·0	81·6	81·4	80·7	80·5	80·5	80·4	79·8	79·8	80·5	13 25	83·5	7 20	76·4	16
83·5	82·6	82·0	81·5	81·1	81·0	80·6	80·5	80·4	81·1	12 5	84·8	6 30	76·5	17
82·0	81·5	81·4	81·0	81·2	81·0	80·7	80·5	80·5	81·2	13 0	84·2	7 15	79·4	18
85·6	84·9	83·9	82·1	81·6	81·2	81·0	80·8	80·6	82·2	15 10	85·7	6 5	79·4	19
81·7	81·2	81·6	81·6	81·5	81·2	81·0	80·6	80·6	81·5	12 45	85·0	15 55	79·6	20
85·2	84·4	83·4	82·0	81·5	81·6	81·6	81·5	81·5	82·2	13 45	85·7	4 30	78·0	21
82·4	82·4	81·5	80·4	79·8	79·9	80·0	79·5	79·5	80·5	11 55	83·4	12 20	78·1	22
83·5	82·9	81·9	80·6	80·0	80·5	80·6	80·5	81·3	81·9	11 35	84·5	6 30	78·5	23
80·0	80·2	78·0	79·2	80·0	80·5	80·1	80·4	80·5	79·8	13 30	83·5	11 5	77·4	24
79·7	79·1	78·1	78·1	77·0	77·9	78·8	77·8	77·7	79·1	13 50	80·6	11 30	76·0	25
75·0	75·4	75·8	76·0	76·2	78·1	76·6	76·1	76·3	76·0	2 0	79·2	7 5	74·5	26
75·4	76·0	76·1	78·1	76·6	78·5	78·4	77·5	77·6	77·2	12 0	79·4	3 39	75·7	27
77·5	77·5	77·2	77·0	77·1	77·5	77·6	77·5	77·5	77·2	11 50	78·5	7 32	76·0	28
77·9	78·0	78·5	78·5	78·3	78·5	78·4	78·0	78·1	78·1	12 45	79·3	4 45	76·8	29
81·0	80·3	79·5	78·8	79·0	78·7	77·9	77·8	77·8	78·8	14 45	81·0	3 56	76·5	30
79·8	78·1	78·0	77·0	77·0	77·0	76·9	77·0	77·1	78·9	12 55	83·5	0 26	76·6	31
82·2	81·7	81·0	80·3	80·1	80·0	79·9	79·7	79·7	80·5					Mean.
+1·7	+1·2	+0·5	—0·2	—0·4	—0·5	—0·6	—0·3	—0·8						Variation.

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

(IN DEGREES FAHRENHEIT.)

SEPTEMBER.

Date.	Hours.															
	0—1	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12	12—13	13—14	14—15
1	77·1	77·5	77·2	76·5	76·9	77·2	77·5	78·3	78·8	79·0	79·4	81·6	82·5	82·5	82·6
2	78·1	77·9	77·7	77·7	77·5	77·5	77·9	78·4	80·1	80·5	81·5	82·3	82·6	83·2	83·5
3	77·6	77·4	77·5	77·7	77·2	77·4	77·6	78·1	79·6	81·0	82·1	82·0	82·7	83·8	83·8
4	78·2	77·7	77·5	77·4	77·3	76·9	77·2	78·2	79·8	80·9	81·7	82·6	82·7	83·6	83·4
5	78·0	77·5	77·4	77·5	77·6	77·6	77·3	77·8	79·3	80·2	80·2	80·6	82·3	83·4	82·6
6	77·6	77·7	77·3	77·6	77·5	77·6	77·8	78·5	79·4	80·8	81·7	82·8	83·5	84·0	83·9
7	78·8	79·0	78·2	78·0	78·0	77·6	78·1	79·1	81·0	82·2	83·0	83·6	84·2	84·8	84·8
8	77·8	78·5	78·5	78·5	78·6	78·6	79·2	80·1	81·3	82·1	83·2	83·0	84·3	84·5	83·0
9	78·9	78·7	77·9	78·4	78·5	78·6	79·3	79·1	80·3	81·3	82·9	83·4	84·0	84·1	84·4
10	76·3	76·9	77·0	78·9	77·4	77·4	77·9	78·5	78·8	79·6	81·4	81·9	82·6	79·3	80·0
11	76·6	76·5	77·0	77·0	77·2	77·5	77·7	78·2	79·4	81·0	81·9	82·4	83·5	83·4	83·7
12	79·4	79·2	79·2	77·8	77·2	77·6	77·8	77·5	76·9	76·9	79·0	78·4	78·0	78·3	79·4
13	77·4	77·7	77·5	77·6	77·4	76·7	77·1	77·4	76·4	76·8	77·7	79·4	79·8	81·4	81·6
14	77·8	77·5	77·2	76·8	77·5	77·5	77·8	77·8	78·8	80·3	80·9	81·1	83·9	84·0	84·1
15	79·1	79·2	78·5	77·0	76·5	76·4	76·5	77·0	77·6	78·6	79·5	78·2	77·7	78·5	79·2
16	78·4	77·5	77·4	76·8	76·6	76·5	76·6	76·8	77·2	76·4	75·6	76·4	76·8	77·5	77·4
17	76·6	76·6	76·5	76·6	76·8	77·2	77·4	77·4	77·5	77·6	78·5	78·7	78·3	77·5	75·6
18	76·4	76·4	76·5	76·4	76·2	76·4	76·6	77·5	78·0	78·5	79·0	80·0	80·0	80·7	81·4
19	76·6	77·6	77·5	77·0	77·2	77·2	77·2	77·3	76·7	78·5	78·6	79·1	80·4	79·8	
20	77·3	77·2	77·1	76·9	76·9	76·1	77·2	78·0	77·8	79·2	79·5	79·5	78·6	78·3	79·3
21	76·4	76·3	76·9	75·7	76·3	76·4	77·0	77·4	77·0	77·1	78·6	79·4	79·1	79·1	79·6
22	77·2	77·4	76·9	76·4	76·0	75·5	75·6	76·4	76·9	78·3	78·5	79·4	80·9	82·4	82·8
23	77·5	77·4	77·4	77·4	77·3	76·6	76·5	78·1	79·3	77·8	77·9	78·8	77·0	77·0	77·7
24	76·5	76·5	76·8	76·5	76·5	76·4	76·8	78·0	79·4	80·0	81·3	82·0	82·5	82·6	83·0
25	78·7	78·9	78·4	78·4	78·2	78·5	78·4	79·4	81·4	82·0	82·1	81·5	81·8	81·1	81·1
26	78·0	77·8	77·5	77·5	77·6	77·5	77·8	78·4	80·0	81·0	81·4	82·3	83·4	83·5	83·5
27	78·7	78·5	77·7	77·5	76·8	76·5	77·0	78·1	80·0	80·4	81·3	81·8	82·6	83·1	83·0
28	78·7	78·6	78·5	78·5	77·7	77·3	76·9	78·0	80·1	81·0	82·4	83·1	83·1	83·1	83·1
29	79·7	79·6	79·5	79·5	79·4	79·2	79·4	79·5	79·8	80·4	81·4	81·5	80·3	79·3	79·4
30	78·1	78·0	78·5	78·4	78·3	78·3	78·3	78·9	80·0	80·8	82·6	84·0	83·5	84·0	85·1
Mean	77·8	77·8	77·6	77·4	77·3	77·3	77·5	78·1	79·0	79·6	80·4	81·0	81·5	81·6	81·6
Variation	−1·3	−1·3	−1·5	−1·7	−1·8	−1·8	−1·6	−1·0	−0·1	+0·5	+1·3	+1·9	+2·4	+2·5	+2·5

OCTOBER.

1	80·4	80·3	80·0	79·7	79·6	79·5	79·8	80·5	81·7	83·0	83·9	84·7	85·3	85·5	85·6
2	80·5	80·6	80·4	80·0	80·0	79·8	80·0	80·7	78·0	78·2	80·0	80·8	81·6	82·0	83·0
3	79·1	79·0	78·8	78·4	78·0	78·0	78·3	76·9	76·7	77·8	80·9	81·2	81·7	82·1	81·8
4	78·8	78·5	78·1	78·0	78·0	77·8	78·0	78·8	79·6	80·5	81·5	80·9	79·6	80·8	82·9
5	79·0	78·8	78·6	78·5	78·5	78·4	78·7	79·8	81·4	82·3	84·9	86·5	86·6	86·2	84·7
6	78·6	79·4	79·2	79·0	79·0	78·8	78·7	80·0	81·5	82·4	83·6	83·8	84·9	84·3	84·4
7	80·5	80·3	80·0	79·9	80·0	80·0	80·1	82·9	81·8	83·3	84·3	84·1	85·1	84·6	84·5
8	78·8	78·5	78·7	78·7	78·5	78·5	78·8	79·8	81·2	82·6	83·5	84·4	85·5	85·9	86·0
9	79·7	79·6	79·1	78·8	78·8	78·7	79·1	80·5	82·0	83·0	84·2	85·0	86·6	86·7	87·0
10	80·9	80·6	86·6	80·7	80·5	79·9	79·3	80·5	81·7	82·7	84·1	84·9	86·4	86·6	86·5
11	80·8	79·0	80·7	80·5	80·1	79·7	79·4	79·5	81·6	82·6	83·8	84·0	85·7	86·1	86·5
12	80·5	80·4	79·8	79·2	79·2	79·1	79·2	80·2	81·8	83·0	84·0	84·6	86·5	86·0	86·2
13	80·1	80·0	79·8	79·5	79·0	78·7	79·5	80·5	82·1	83·2	83·7	84·3	84·8	85·6	85·7
14	79·6	79·8	80·1	79·1	78·4	78·3	78·7	79·8	81·0	82·3	83·8	84·9	85·4	85·5	86·3
15	79·1	78·7	78·5	78·4	78·0	78·1	78·8	80·0	81·3	83·2	84·8	85·7	87·0	86·8	86·6
16	80·2	80·0	79·7	79·1	79·2	78·7	79·3	80·8	82·2	84·1	85·6	86·8	88·5	89·4	89·2
17	80·5	79·8	79·5	79·1	79·0	78·6	77·8	80·2	82·5	84·1	85·7	85·1	83·9	84·1	84·4
18	79·6	79·2	79·0	78·8	78·9	78·9	78·8	80·2	81·9	83·6	85·2	86·8	86·4	86·4	86·6
19	81·2	81·0	80·4	79·8	79·4	79·5	79·6	80·4	81·7	83·1	84·3	85·7	85·9	86·1	86·4
20	79·1	78·7	78·5	78·5	78·0	78·5	78·7	79·6	81·1	82·8	84·3	86·2	87·5	87·2	86·7
21	79·7	79·5	79·1	79·0	78·1	77·0	77·8	78·6	79·9	81·1	83·7	86·6	89·1	91·5	90·0
22	80·4	80·2	78·5	77·1	76·7	76·9	77·0	78·4	80·2	82·0	84·4	86·6	87·1	86·4	85·5
23	80·0	80·4	80·0	79·8	80·0	80·0	80·2	80·8	81·8	82·7	82·8	82·5	83·1	84·1	85·2
24	80·9	80·7	79·9	79·5	79·0	78·7	79·7	80·8	82·5	84·2	86·1	84·8	84·2	84·2	84·8
25	79·7	79·6	79·4	79·4	79·4	79·5	79·5	80·0	81·3	82·5	83·8	83·9	83·9	83·3	83·4
26	79·4	79·5	79·0	78·5	78·2	77·0	76·7	77·0	77·7	79·2	79·3	80·8	80·3	81·2	81·5
27	77·9	76·7	76·7	76·9	76·6	76·3	76·4	77·2	78·8	80·0	81·6	82·0	82·7	82·7	82·6
28	79·6	76·9	76·3	76·0	74·6	74·5	76·4	76·4	78·9	80·8	82·2	83·2	83·6	83·5	83·5
29	78·8	78·0	77·0	76·7	76·1	75·2	75·1	77·0	79·2	80·9	83·3	83·5	84·0	83·7	83·8
30	78·1	77·2	76·8	76·6	77·0	76·9	76·2	78·0	80·5	82·1	83·1	84·5	84·2	84·0	83·9
31	78·0	77·4	77·1	77·0	76·9	76·0	75·8	77·7	80·0	81·4	83·2	84·3	84·8	85·1	85·1
Mean	79·6	79·3	79·0	78·7	78·5	78·2	78·4	79·4	80·7	82·2	83·6	84·3	84·8	85·1	85·2
Variation	−1·8	−2·1	−2·4	−2·7	−2·9	−3·2	−3·0	−2·0	−0·7	+0·8	+2·2	+2·9	+3·4	+3·7	+3·8

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

SEPTEMBER. (IN DEGREES FAHRENHEIT).

Hours.										Mean.	Maximum.		Minimum.		Date.
15—16	16—17	17—18	18—19	19—20	20—21	21—22	22—23	23—24			Time.	Mag.	Time.	Mag.	
											H. M.		H. M.		
82·1	81·1	81·0	80·0	79·5	79·4	79·0	78·6	78·5	79·3	14	18	82·7	3	45	76·3	1
85·5	82·8	81·5	80·4	79·9	79·4	79·1	78·6	78·3	80·0	14	31	84·0	5	8	77·4	2
83·6	82·9	81·5	80·3	79·5	79·0	78·5	78·5	78·5	79·9	15	20	84·1	4	40	76·9	3
83·1	83·0	82·0	80·5	79·9	79·0	78·4	78·2	78·4	79·9	13	38	83·8	5	35	76·7	4
81·2	80·6	80·6	79·5	79·2	78·8	78·5	78·2	78·0	79·3	13	15	83·8	5	50	76·9	5
84·4	83·5	82·0	80·4	80·3	79·9	79·6	79·3	79·0	80·3	15	30	84·5	5	0	77·4	6
83·8	83·1	80·2	79·3	79·5	79·5	79·5	79·5	79·4	80·6	14	45	85·2	5	40	77·5	7
81·5	81·6	81·4	80·6	80·5	78·7	77·4	78·3	78·4	80·4	13	10	84·7	21	0	77·0	8
83·9	82·3	82·0	80·8	80·5	80·4	77·4	76·2	76·4	80·4	14	14	84·5	22	8	76·0	9
78·1	78·2	78·6	78·0	77·5	76·2	76·4	77·2	77·1	78·3	13	36	82·3	20	20	76·1	10
83·6	83·4	82·4	81·1	80·5	80·1	80·1	80·1	79·8	80·2	14	52	84·3	0	32	76·4	11
79·5	78·7	78·5	78·3	77·8	77·4	77·1	77·4	77·4	78·1	15	20	79·7	8	45	76·4	12
81·9	79·5	78·8	79·4	79·1	78·6	78·0	77·5	77·9	78·4	15	55	82·4	3	14	75·7	13
83·9	82·7	81·6	80·5	80·1	80·0	79·7	79·6	79·5	80·1	13	42	84·3	3	22	76·7	14
80·3	81·6	80·7	80·0	78·8	78·4	78·3	77·6	78·5	78·5	16	22	82·0	6	35	76·3	15
76·8	76·6	76·5	76·4	76·4	76·5	76·5	76·6	76·2	76·8	0	18	78·5	10	30	75·5	16
76·4	74·6	74·4	73·8	74·5	74·8	75·4	75·5	75·6	75·4	11	38	78·8	18	26	73·6	17
80·8	80·4	79·5	79·4	79·2	79·0	79·5	78·1	77·0	78·5	14	32	82·0	4	5	76·1	18
79·4	79·5	78·8	78·0	78·1	78·0	77·4	77·0	77·3	78·0	14	2	80·6	0	18	76·4	19
78·8	78·3	77·1	76·0	75·9	75·5	75·7	76·1	76·5	77·5	12	10	79·0	18	56	75·4	20
78·4	77·1	77·0	77·0	76·9	77·3	77·0	77·5	77·3	77·2	13	14	79·8	3	52	75·5	21
82·1	82·1	81·4	80·5	80·1	80·0	79·7	79·6	79·5	78·7	14	44	83·0	5	25	75·4	22
76·8	77·3	77·5	77·0	76·9	77·4	77·5	77·3	76·9	77·4	8	40	79·5	5	50	76·5	23
83·0	82·2	81·1	80·4	80·0	79·7	79·5	79·4	79·4	79·6	16	10	83·1	5	40	76·3	24
79·5	79·7	79·6	77·8	77·4	77·1	77·3	77·9	78·0	79·3	12	25	83·5	21	0	76·8	25
83·2	82·1	81·2	80·2	79·7	79·5	79·6	79·5	79·1	80·1	14	28	83·6	6	10	77·4	26
82·1	81·9	81·0	80·0	79·7	79·6	79·6	79·5	79·1	79·8	14	38	83·5	6	10	76·3	27
82·5	81·8	80·6	80·0	79·9	79·8	79·8	79·6	79·7	80·1	12	32	83·6	6	20	76·8	28
79·5	79·4	79·3	79·0	79·0	78·9	78·9	78·8	78·6	79·6	11	20	81·8	23	56	78·3	29
85·1	84·2	82·8	81·5	81·4	81·3	80·8	80·6	80·5	81·0	14	32	85·5	6	10	77·9	30
81·3	80·8	80·0	79·2	78·9	78·6	78·4	78·2	78·1	79·1							Mean.
+2·2	+7	+0·9	+0·1	—0·2	—0·5	—0·7	—0·9	—1·0								Variation.

OCTOBER.

85·3	84·4	83·0	82·2	82·0	81·4	81·2	80·7	80·5	82·1	12	57	85·7	5	50	79·4	1
82·7	81·2	80·2	79·6	79·3	79·1	79·1	78·9	78·9	80·4	14	26	83·1	8	43	77·3	2
82·3	82·3	81·3	80·4	80·0	79·5	79·3	79·5	79·9	79·7	12	54	82·5	5	12	76·4	3
83·4	82·4	81·3	80·5	80·3	79·9	79·5	79·4	79·3	79·9	15	18	83·8	5	24	77·3	4
84·2	83·2	82·3	81·8	81·4	80·9	80·8	79·9	79·5	81·5	11	55	85·7	5	50	78·2	5
84·5	83·9	83·9	82·1	81·7	81·5	81·1	81·0	80·6	81·6	15	5	84·8	5	6	78·6	6
84·9	84·6	83·5	82·1	81·9	82·0	81·2	80·3	79·8	82·1	12	28	85·5	0	7	79·3	7
86·1	85·6	84·5	83·8	83·5	83·5	83·0	82·1	80·4	82·2	15	32	86·3	4	32	78·3	8
86·8	86·0	84·8	83·9	83·5	83·0	82·5	81·9	81·5	82·6	13	53	87·4	5	2	78·4	9
86·6	85·9	84·5	83·6	83·0	82·3	81·8	81·3	80·9	82·7	14	57	87·1	6	28	79·2	10
86·3	85·2	84·0	83·2	82·9	82·4	81·7	81·0	80·5	82·5	14	32	86·6	5	0	78·9	11
85·9	85·0	83·7	82·8	82·3	81·8	81·4	81·1	80·6	82·2	13	32	86·5	6	2	78·7	12
85·5	84·6	83·1	82·4	81·9	81·5	81·1	80·7	79·8	82·0	13	56	86·0	5	25	78·5	13
85·3	84·7	83·4	82·5	81·9	81·2	80·5	79·9	79·5	81·7	14	26	86·0	6	0	78·0	14
86·2	85·1	84·1	83·1	82·5	81·8	81·1	80·9	80·6	82·1	12	35	87·6	4	7	77·9	15
88·7	87·1	85·0	83·8	83·2	82·5	81·8	80·9	80·9	83·2	14	47	89·7	5	28	78·5	16
84·9	84·6	83·5	82·5	82·1	82·0	81·0	80·1	79·6	81·9	10	52	86·0	6	30	77·5	17
86·5	85·6	84·4	83·5	83·0	82·3	81·7	81·2	81·0	82·4	14	40	87·1	6	37	78·5	18
86·0	85·2	84·3	83·0	82·0	79·6	78·4	79·0	79·1	81·9	14	0	86·7	22	10	76·7	19
86·6	85·9	84·9	84·0	83·7	83·5	83·0	82·1	80·7	82·5	12	45	87·9	4	32	77·7	20
86·3	85·2	85·2	84·0	83·1	81·9	81·1	81·2	80·8	82·6	13	35	92·2	5	55	76·4	21
84·3	83·1	82·6	82·2	81·8	81·5	81·1	80·4	80·1	81·4	12	30	87·8	4	18	76·4	22
84·5	82·1	82·5	82·0	81·5	81·0	81·0	80·8	80·6	81·7	15	2	85·5	0	23	79·6	23
84·5	83·1	81·9	81·1	80·9	80·5	80·5	79·7	79·8	81·7	10	40	86·8	5	18	78·5	24
84·0	83·2	82·0	80·8	80·5	80·6	80·5	80·5	80·0	81·2	11	10	84·2	3	15	79·3	25
82·0	81·3	80·1	79·2	78·9	78·5	78·2	77·4	77·4	79·1	16	30	82·2	6	15	76·6	26
82·4	81·3	80·3	79·5	79·2	79·2	78·6	78·0	77·3	79·2	13	38	83·6	4	55	76·1	27
82·8	81·7	80·7	80·2	80·0	79·9	79·8	79·5	79·0	79·3	12	0	84·2	5	15	74·3	28
83·6	82·5	81·5	81·0	80·8	80·6	80·0	79·4	78·5	80·0	12	35	84·4	6	0	74·8	29
82·5	82·4	81·3	80·7	80·6	80·4	79·7	78·9	78·3	80·2	11	30	84·7	6	32	75·9	30
84·8	84·1	82·4	81·9	81·6	81·5	80·9	80·0	79·5	80·7	13	40	85·5	6	10	75·5	31
84·9	84·0	82·8	82·0	81·6	81·2	80·8	80·2	79·8	81·4							Mean.
+3·5	+2·6	+1·4	+0·6	+0·2	—0·2	—0·6	—1·2	—1·6								Variation.

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)
(IN DEGREES FAHRENHEIT.)

NOVEMBER.

Date.	Hours.																							
	0—1	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12	12—13	13—14	14—15									
1	79·3	78·2	78·0	78·0	77·2	76·9	76·6	77·8	80·4	82·4	84·9	88·0	91·0	91·2	89·1									
2	78·8	78·0	77·2	77·0	76·5	76·5	76·5	77·9	80·0	82·0	86·0	86·6	88·9	88·9	86·8									
3	78·4	78·0	78·1	77·3	76·9	76·3	76·4	76·9	79·2	81·3	83·5	85·5	86·2	86·0	86·0									
4	78·5	78·4	77·9	77·5	77·0	76·3	77·0	76·8	79·0	81·3	83·4	84·9	87·0	87·4	86·0									
5	78·1	77·9	77·7	77·4	76·9	77·0	76·6	77·9	79·3	81·3	84·9	87·7	89·8	90·3	91·0									
6	78·6	78·4	77·9	77·9	78·0	77·5	77·7	78·9	80·3	82·3	84·8	86·4	88·3	88·6	87·8									
7	78·1	77·7	77·0	76·8	77·0	77·0	77·5	77·8	79·9	80·9	83·0	84·5	87·0	87·5	87·0									
8	77·2	76·6	76·3	75·6	75·3	75·2	74·8	76·3	77·9	79·3	81·8	84·3	86·4	87·1	86·0									
9	76·6	76·5	76·0	75·9	75·7	75·5	75·6	76·4	77·9	79·1	81·4	83·4	85·9	86·4	86·5									
10	76·6	77·2	76·4	76·0	76·9	74·7	75·1	76·0	77·9	79·5	81·6	83·1	84·9	86·3	86·5									
11	77·2	77·0	76·2	76·0	76·5	75·6	75·7	76·4	77·8	78·9	81·0	82·6	85·0	87·3	86·9									
12	76·3	76·5	76·3	76·0	75·4	75·1	75·1	75·3	77·0	79·0	81·4	83·5	86·0	86·1	85·7									
13	75·7	75·4	76·0	75·8	76·0	75·8	75·7	76·4	77·9	79·8	80·7	81·4	83·0	83·5	83·6									
14	78·0	77·5	77·4	77·4	77·3	77·0	76·8	77·9	80·2	80·9	81·4	82·5	83·8	83·4	82·5									
15	79·5	79·0	78·2	78·0	78·4	78·6	78·6	79·0	80·5	82·0	83·5	84·5	85·2	85·7	83·5									
16	78·1	78·2	77·9	77·9	77·2	76·9	76·6	77·1	78·3	79·0	81·0	82·7	84·6	85·9	86·4									
17	78·1	78·2	77·5	77·5	77·0	76·8	76·8	77·7	79·5	81·5	84·0	85·5	87·5	87·8	87·5									
18	79·0	79·3	78·4	77·6	77·5	77·5	77·4	78·0	79·9	82·1	84·3	86·6	88·2	89·0	87·4									
19	79·1	78·7	78·5	78·4	77·8	77·4	77·5	78·8	80·4	82·3	86·1	85·0	89·7	87·8	86·4									
20	78·6	78·5	77·8	78·0	77·3	76·8	76·8	78·0	79·2	81·0	83·7	86·8	88·4	87·6	87·4									
21	79·1	78·5	77·6	77·0	77·2	76·0	76·9	77·4	78·9	80·8	83·0	85·2	88·0	89·4	87·2									
22	77·9	77·3	76·9	76·0	75·4	75·4	75·4	76·0	78·9	80·9	82·6	83·6	83·8	83·8	83·5									
23	76·8	76·5	76·2	74·8	74·6	74·2	74·6	75·1	77·9	79·6	81·5	83·4	84·4	84·4	84·1									
24	76·6	76·3	76·1	76·1	76·6	76·4	76·0	76·1	77·3	78·1	80·4	82·4	85·4	85·6	85 2									
25	77·8	77·7	76·5	76·0	76·0	75·3	75·2	75·8	77·5	78·7	81·2	83·2	86·1	86·6	86·6									
26	77·0	76·9	76·6	76·9	76·7	75 2	75·4	76·9	78·9	80·4	83·0	84·8	86·1	86·8	86·6									
27	77·4	76·9	76·2	76·0	75·4	74·8	74·7	75·1	76·5	78·5	80·6	82·8	84·8	86·0	86·1									
28	77·1	76·8	76·5	75·0	74·3	74·2	73·7	74·9	76·4	78·0	80·0	81·4	82	82·4	81·9									
29	74·4	74·3	74·1	73·7	73·6	73·4	73·4	74·1	75·8	77·4	79·9	81·8	82·3	82·5	82·4									
30	77·3	76·4	76·2	75·6	74·8	74·2	73·7	74·1	76·0	76·9	77·5	79·1	79·8	80·3	80·3									
Mean .	77·7	77·4	76·9	76·6	76·3	76·0	76·0	76·8	78·5	80·2	82·3	84·2	86·0	86·3	85·8									
Variation .	−2·5	−2·8	−3·3	−3·6	−3·9	−4·2	−4·2	−3·4	−1·7	0·0	+2·1	+4·0	+5·8	+6·1	+5·6									

DECEMBER.

1	73·0	73·6	72·4	71·4	71·7	72·2	71·4	72·1	74·0	76·0	77·5	78·8	79·8	80·2	80·4									
2	72·9	73·1	72·5	71·6	71·5	71·0	70·2	71·4	74·0	76·0	78·1	79·3	8·2	80·6	80·4									
3	72·4	71·7	70·3	69·5	69·1	68·4	68·3	69·0	71·8	74·3	77·1	79·0	80·4	80·3	80·2									
4	71·6	72·3	72·0	71·2	70·4	69·9	69·5	70·5	73·7	76·8	77·9	79·3	80·3	81·6	81·6									
5	73·7	74·1	74·6	74·5	73·9	73·6	74·2	76·1	76·5	78·3	80·1	82·6	85·2	85·1	84·5									
6	76·4	77·1	77·1	76·7	76·5	76·4	76·2	76·6	77·1	78·7	81·3	82·5	82·9	83·0	82·4									
7	76·5	76·5	76·5	76·1	75·7	75·3	75·1	75·9	77·2	79·2	81·0	83·0	84·9	85·6	85·0									
8	77·6	77·5	77·5	76·9	76·1	76·0	76·3	76·8	78·2	79·9	81·9	82·6	82·7	82·7	82·5									
9	75·9	76·7	75·6	75·8	68·7	75·7	76·3	78·2	80·0	82·2	84·1	86·0	87·8	87·8	84·1									
10	77·1	77·0	77·4	77·3	77·5	77·5	77·1	77·5	78·9	81·0	83·4	85·4	87·0	86·2	85·0									
11	78·1	77·5	77·6	77·4	76·9	76·9	76·6	77·4	79·1	80·8	83·0	84·8	87·4	88·6	87·8									
12	78·2	77·5	77·2	77·2	76·7	76·0	76·5	76·0	78·0	79·9	81·7	82·8	84·9	85·0	85·3									
13	76·2	76·1	76·4	74·1	74·1	73·2	73·8	74·6	76·0	78·1	79·9	84·9	82·1	82·4	82·6									
14	75·6	75·1	74·0	73·6	73·5	73·4	72·8	73·4	75·1	76·6	78·3	79·7	81·6	83·0	83·2									
15	74·9	74·9	73·5	72·4	72·1	72·5	72·0	72·4	74·8	76·2	78·0	79·9	82·1	81·8	81·9									
16	73·5	73·5	73·2	72·8	72·4	72·2	72·2	72·5	74·0	75·8	78·2	80·3	82·9	84·2	85·4									
17	74·7	74·5	73·3	71·7	70·7	70·6	71·2	74·7	77·2	79·0	80·6	81·9	83·4	83·5										
18	72·9	72·3	73·2	72·6	72·5	71·9	71·2	71·6	73·0	76·0	77 3	79·5	82·0	84·1	84·1									
19	73·0	73 0	72·6	72·5	71·8	71·6	71·4	71·6	72·7	74·7	77·1	79·2	82·0	83·5	84·6									
20	71·1	71 3	73·1	72·0	71·6	71·5	71·4	71·3	72·1	74·2	76·7	78·6	80·2	81·9	83·2									
21	71·1	71·3	71·1	70·9	70·7	70·9	69·7	72·5	74·0	76·5	78·0	79·8	81·2	82·2										
22	69·7	70·1	69·1	68·8	68·8	68·1	67·6	68·1	69·9	71·9	74·9	78·0	79·8	81·5	82·0									
23	69·2	69·2	69·0	68·9	68·7	68·0	68·2	69·4	70·3	72·6	75·2	78·3	80·9	83·7	84·4									
24	69·1	68·3	68·3	68·5	68·4	68·0	68·5	69·7	70·9	72·6	75·6	77·6	80·2	82·3	81·6									
25	69·6	70·1	69·8	69·4	68·8	68·6	68·1	68·9	71·0	73·5	76·2	78·1	81·1	82·6	81·9									
26	71·3	70·2	69·6	69·7	70·0	69·5	69·7	70·2	72·0	74·2	76·7	78·9	81·6	8·4	8·2									
27	73·9	73·5	72·6	71·4	70·7	70·0	70·2	70·8	72·8	74·5	76·7	79·1	80·2	81·1	81·9									
28	72·8	72·1	72·1	72·7	71·6	70·7	70·5	71·1	73·8	76·3	77·8	78·4	78·4	78·5	79·2									
29	72·1	71·5	71·0	70·6	70·2	69·2	69·0	69·5	72·0	74·3	76·5	78·7	79·6	79·7	80·0									
30	71·9	71·2	70·9	70·2	69·6	69·3	69·3	69·5	71·5	74·2	76·2	77 6	77·8	79·6	79·7									
31	68·4	67·5	66·8	66·1	65·1	63·6	63·0	62·7	65·1	68·8	71·5	73·5	75·1	76·2	77·1									
Mean .	73·4	73·2	72·9	72·5	72·0	71·7	71·5	72·1	73·9	76·0	78·2	80·0	81·7	82·5	82·5									
Variation .	−2·9	−3·1	−3·4	−3·8	−4·3	−4·6	−4·8	−4·2	−2·4	−0·3	+1·9	+3·7	+5·4	+6·2	+6·2									

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

NOVEMBER. (IN DEGREES FAHRENHEIT.)

Hours.												Mean.	Maximum.			Minimum.			Date.
16—16	16—17	17—18	18—19	19—20	20—21	21—22	22—23	23—24					Time.		Mag.	Time.		Mag.	
													H.	M.		H.	M.		
88·8	85·9	84·0	83·0	82·5	81·7	80·8	80·4	79·5	82·3	13	10	92·1	6	22	76·4	1
85·9	83·4	81·9	81·4	81·0	80·4	79·9	79·3	79·4	81·2	13	5	89·9	6	12	76·1	2
84·9	83·1	82·0	81·3	80·5	79·6	79·1	78·9	79·2	80·6	12	28	86·4	6	55	76·1	3
85·9	84·1	83·0	82·0	81·5	81·2	80·3	79·1	78·5	81·0	13	38	88·0	5	45	76·1	4
90·6	86·3	84·1	83·1	82·1	81·6	81·0	80·0	79·1	82·2	14	34	91·6	6	25	76·4	5
86·5	85·0	83·3	81·8	81·2	80·6	79·8	78·2	78·0	81·6	12	50	89·0	6	15	77·3	6
85·5	83·9	82·4	81·4	80·9	80·4	79·5	78·2	77·5	80·7	13	32	87·8	3	50	76 5	7
85·0	83·2	82·1	81·3	80·8	79·8	78·5	78·4	77·4	79·9	13	33	87·6	6	22	74·2	8
85·5	83·6	82·1	81·0	80·8	80·0	79·1	78·3	77·2	79·9	14	38	87·0	6	15	75·2	9
86·6	83·4	82·2	81·3	80·9	79·9	78·7	77·8	77·1	79·8	14	15	87·6	5	50	74 4	10
86·4	84·9	82·3	81·1	80·3	79·0	78·7	77·7	77·0	79·8	14	0	87·6	6	30	75·2	11
84·4	83·8	81·4	80 6	80·0	79·1	78·5	77·7	76·6	79·4	13	24	86·6	6	5	75·0	12
83·0	82·3	81·3	80·6	80·3	80·4	79·9	79·4	78·6	79·3	14	35	83·7	6	18	76·4	13
81 9	81·1	80·0	80·4	80·2	79·9	79·5	79 4	79·5	79·9	13	4	84·0	6	15	76·5	14
83 0	82 0	81·0	80·5	80 5	80·1	79 5	78·5	78·5	80·7	12	24	85·7	3	56	77 9	15
86 6	84·9	83·3	81·9	81·4	80·6	79·8	78·6	78·2	80·5	15	22	86·7	6	25	76·4	16
86·2	84·4	82·9	82·0	81·4	80·6	80·5	80·0	79 6	81·3	12	52	88 2	5	50	76·6	17
86·0	84·8	83·1	82·5	82·1	81·9	81·0	79·5	79·0	81·9	12	50	89·4	6	35	77 3	18
86·9	84·0	82·5	82·2	82·0	81·5	80·6	79 5	78·7	81 8	12	58	90·6	5	50	77·0	19
86·7	84·9	83·2	82·4	82·1	81·4	80·9	79·9	79 9	81·5	12	36	89·5	6	25	76·6	20
86·2	83·9	82 8	81·8	81·1	80·6	79·8	79·0	78·1	81·1	13	30	90·0	5	42	75 2	21
85·9	81·6	80·4	80·0	79·5	79·4	79·0	77·4	76·4	79 3	13	48	84·6	3	28	74 8	22
83·6	82·0	80 9	81·3	80·1	79·9	79·6	79·4	78·2	79·1	13	4	84 8	P	36	73·6	23
84·4	83·4	82·0	81·3	79·4	78·8	78·6	78·9	78·4	79·5	12	58	86·1	2	55	75·9	24
85 6	83·6	82·4	81·3	80 7	80·0	78·9	77·8	77·7	79·9	14	8	87·5	6	6	74·5	25
86 3	84·8	83·0	81·8	81·0	79·6	78·5	77·4	77·7	80·2	13	15	87·1	6	4	74·8	26
85·1	83·5	82·0	80·9	80·5	79·2	78·1	77·0	77·1	79·4	15	0	86·5	6	4	73·6	27
82·1	81·4	79·8	78·8	78·5	78·0	77·0	76·2	75·1	77·9	13	34	82·6	6	24	73·5	28
82·0	80 9	79·6	78·6	78 1	78·1	77·9	77·8	78·0	77·7	12	58	82·6	6	35	73 2	29
79·8	78 3	77·1	76·5	76·3	75 0	74·0	73·1	72·8	76·5	13	20	80·5	23	14	72·4	30
85·1	83·4	82·0	81·1	80·6	79 9	79·2	78·4	77·9	80·2							Mean.
+4·9	+3·2	+1·8	+0 9	+0·4	—0·3	—1·0	—1·8	—2·3								Variation.

DECEMBER.

79·9	79·3	78·1	77·1	76·6	76·6	75·8	74·7	74·4	75·7	13	30	80·7	3	55	71·3	1
80 1	79·1	77·8	77 0	76·2	75·0	74·4	73·6	73·6	75·4	13	34	80 7	6	4	70·0	2
79·6	78·5	77·3	76·8	76·0	74·9	73·9	73·2	72·3	74·3	13	2	80·8	6	21	68·0	3
81·1	79·9	78·9	78·0	78·0	77·7	77·2	76·8	76·3	76·9	13	56	81 8	6	44	69·4	4
84·2	82·4	80·9	79·6	78·6	78·0	77·7	77·2	76·2	78·5	12	54	86·1	5	54	73·4	5
82 7	81·6	80·5	78·8	79·5	79·0	78·2	77·5	76·9	79·0	12	54	83·9	0	0	76·1	6
84·2	82·1	80·0	79·2	79·2	79·2	78·7	78·6	78·2	79·3	13	35	85·5	6	30	75·1	7
82·4	81·1	79·7	79·4	79·1	78·7	78·0	77·3	76·5	79·1	12	47	83·2	5	33	75·7	8
83·1	81·2	79·9	79·2	79·0	78·9	78·5	78·0	77·7	79·3	13	8	87·0	6	10	76·2	9
84·4	82·9	81·4	80·5	80·0	79·8	79·2	78·8	78·1	80·4	12	28	87·8	0	30	76·9	10
86 3	84·8	83·0	81·8	81·0	79·6	78·5	77·4	77·7	80·2	13	15	87·1	6	4	76·8	11
85·1	83·5	82·0	80·9	80·5	79·2	78·1	77·0	77·1	79·4	15	0	86·5	6	4	73·6	27
82·1	81·4	79·8	78·8	78·5	78·0	77·0	76·2	75·1	77·9	13	34	82·6	6	24	73·5	28
82·0	80 9	79·6	78·6	78 1	78·1	77·9	77·8	78·0	77·7	12	58	82·6	6	35	73 2	29
79·8	78 3	77·1	76·5	76·3	75 0	74·0	73·1	72·8	76·5	13	20	80·5	23	14	72·4	30
81·9	80·4	78·8	77·8	77·1	76·4	75·5	74·5	73·7	76·2							Mean.
+5·6	+4·1	+2·5	+1·5	+0·8	+0·1	—0·7	—1·8	—2·6								Variation.

JANUARY. (THE FIGURES REPRESENT PERCENTAGES.)

Date.	Hours.												
	0—1	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12	12—13
1	64	63	65	61	63	67	64	63	54	51	47	47	46
2	63	63	66	72	70	74	74	71	6	62	55	49	52
3	77	75	74	76	75	75	78	78	76	72	62	56	51
4	7	73	68	67	74	74	77	80	73	68	62	55	47
5	70	71	72	75	73	77	76	76	77	74	62	59	46
6	63	56	61	63	66	67	66	66	72	61	54	51	44
7	77	7	64	71	70	74	76	77	73	68	64	58	50
8	81	78	77	71	77	80	82	82	78	76	64	67	61
9	83	85	84	83	82	83	81	80	79	76	73	66	53
10	74	71	74	76	74	74	74	74	73	70	6.	56	53
11	62	61	58	62	72	70	73	72	72	70	66	62	59
12	79	76	75	77	82	78	79	78	72	66	66	58	55
13	75	76	78	76	75	76	74	76	76	72	67	60	57
14	77	78	76	79	80	78	80	77	70	77	72	53	46
15	74	70	7.	78	80	79	76	73	79	6"	67	60	52
16	80	79	75	77	76	76	80	78	77	73	70	61	61
17	74	79	80	80	76	76	61	63	65	69	69	54	56
18	72	70	70	69	66	72	75	77	64	54	61	56	54
19	64	59	56	53	55	57	70	71	69	68	46	52	58
20	75	80	76	75	77	72	74	76	72	68	59	61	57
21	71	72	71	68	73	6.	68	68	65	66	66	62	62
22	72	75	77	73	73	74	71	69	72	68	59	61	62
23	80	80	79	82	86	84	81	83	82	76	69	69	65
24	70	66	63	65	63	64	62	63	60	48	48	52	54
25	69	69	69	67	67	75	75	74	71	67	67	66	63
26	60	60	61	64	67	70	71	73	73	72	68	57	58
27	81	79	86	8.	87	87	87	87	85	81	75	66	68
28	80	80	81	80	77	68	67	67	64	60	53	46	47
29	58	59	55	56	58	58	55	54	50	42	41	40	45
30	55	52	50	47	47	49	49	51	48	44	49	47	47
31	65	66	70	68	62	61	60	61	56	52	54	51	47
Mean .	71·5	70·6	70·4	70·9	71·8	72·1	72·4	72·1	69·8	66·4	61·1	56·8	54·4
*Mean Vapour Pressure in inches of mercury.	·562	·547	·537	·535	·534	·531	·528	·531	·551	·560	·559	·549	·554

FEBRUARY.

1	67	63	66	60	55	57	60	51	47	44	44	42	45
2	48	48	49	51	58	60	60	51	44	45	44	41	42
3	48	42	47	48	49	51	55	55	55	51	50	51	50
4	50	50	51	52	53	40	52	54	43	36	37	37	36
5	52	52	47	40	42	42	47	57	57	51	48	43	40
6	73	72	74	77	77	69	71	71	69	66	64	62	57
7	79	72	74	79	80	80	72	72	72	67	60	62	60
8	71	72	69	64	65	70	72	63	52	59	56	53	51
9	90	90	91	87	86	84	84	80	74	71	57	48	48
10	88	87	88	89	87	84	86	85	78	76	69	66	66
11	85	87	83	83	84	84	82	80	76	72	69	62	64
12	84	84	86	88	80	84	85	85	80	66	62	65	69
13	76	75	77	80	81	83	81	80	73	74	72	73	71
14	83	85	83	81	81	81	77	78	68	54	56	58	55
15	67	66	65	65	65	64	69	54	48	47	49	45	48
16	60	63	60	65	61	54	60	67	64	59	57	51	48
17	68	75	75	72	79	79	77	80	73	67	62	58	62
18	86	84	85	82	83	82	70	75	71	69	61	57	53
19	85	86	86	86	83	77	75	69	72	58	57	63	69
20	86	80	81	76	72	74	80	78	74	72	69	56	60
21	79	80	82	83	86	88	86	87	84	80	76	74	74
22	88	88	89	90	90	90	92	92	85	79	68	63	62
23	75	75	75	81	81	85	83	92	76	61	57	49	59
24	77	79	77	80	79	75	77	75	73	68	65	65	57
25	68	69	79	74	73	67	68	70	68	61	53	46	55
26	72	74	73	66	73	74	69	64	64	59	56	44	46
27	80	77	79	82	85	85	83	76	72	68	61	54	52
28	86	85	83	86	85	88	85	80	74	72	65	57	50
29	89	89	88	89	90	90	89	86	77	71	71	74	77
Mean .	74·4	74·1	75·0	74·3	74·6	74·2	73·3	72·3	67·6	62·9	58·8	55·8	56·0
*Mean Vapour Pressure in inches of mercury.	·558	·548	·547	·536	·528	·520	·503	·510	·517	·518	·523	·525	·545

* Computed from mean temperatures and mean relative humidities.

JANUARY. (THE FIGURES REPRESENT PERCENTAGES.)

Hours.												Mean.	* Mean Vapour Pressure.	Date.
13—14	14—15	15—16	16—17	17—18	18—19	19—20	20—21	21—22	22—23	23—24				
													"	
47	51	57	61	64	66	62	60	62	57	54		59·3	·464	1
56	61	64	69	73	75	76	75	76	76	75		67·1	·555	2
46	40	52	58	66	69	75	73	69	63	69		66 8	·577	3
54	56	57	61	68	71	72	78	74	69	70		61·3	·568	4
48	53	51	55	58	63	61	63	53	64	68		63·9	·548	5
41	42	52	64	71	76	72	68	65	69	78		6 ·7	·549	6
60	62	70	70	68	70	69	67	68	73	75		68·5	·8 4	7
57	56	64	70	78	78	75	78	80	84	73		73·8.	·704	8
71	71	71	72	71	75	76	73	67	68	70		74·7	·69	9
58	61	61	65	67	69	66	64	59	62	64		66·3	·620	10
54	43	41	43	45	52	54	58	66	63	73		60·5	·588	11
53	56	62	67	64	66	67	70	68	64	72		64·9	·607	12
60	63	66	71	73	77	80	80	75	74	76		72·6	·624	13
47	50	53	62	68	75	79	79	77	66	75		70·9	·546	14
57	64	59	61	66	74	78	77	76	72	74		70·2	·633	15
57	60	61	68	72	75	76	79	81	80	80		73·0	·650	16
52	52	59	64	66	65	65	67	63	58	65		65·6	·570	17
56	54	56	65	61	69	68	64	59	62	64		66·5	·610	18
59	61	62	62	63	67	67	69	71	67	65		62·2	·532	19
59	59	64	67	69	72	75	75	72	70	70		69·7	·6 6	20
62	63	63	64	63	66	65	62	62	62	64		66·9	·577	21
64	64	67	70	74	79	80	82	85	85	81		72·4	·611	22
66	61	61	61	65	69	64	71	75	79	81		73·9	·647	23
55	52	53	47	47	49	59	66	63	59	57		57·6	·471	24
58	58	54	53	50	59	64	65	67	62	61		61·7	·530	25
67	64	63	65	67	70	72	75	78	81	85		69·5	·553	26
55	59	60	61	67	70	71	74	76	77	79		75·6	·621	27
49	48	48	46	50	59	63	61	55	5	54		60·6	·489	28
48	52	55	56	60	60	57	53	55	53	55		53·8	·499	29
54	57	60	63	64	68	70	71	71	69	69		50·3	·403	30
47	51	57	57	57	60	60	62	65	65	68		59·3	·461	31
55·8	56·2	58·8	61·8	65·0	67·5	68·6	69·3	68·7	67·7	70·1		68·2	·569	Mean.
"	"	"	"	"	"	"	"	"	"	"		"		*Mean Vapour Pressure in inches of mercury.
·576	·580	·599	·635	·669	·610	·608	·600	·579	·586	·582		·565		

FEBRUARY.

47	46	43	41	48	59	53	57	54	55	51	52·3	·388	1
43	49	50	47	5 ·	42	39	39	45	51	51	47·8	·334	2
50	47	48	4 ·	53	53	54	56	51	58	60	5 ·3	·312	3
37	37	37	33	42	47	49	55	52	46	42	45·1	·296	4
50	54	57	62	71	73	73	69	68	70	72	56·1	·404	5
58	59	62	68	75	80	80	80	82	82	84	71·3	·538	6
57	54	56	67	64	69	74	78	76	76	77	71·7	·541	7
32	56	63	69	75	79	82	80	83	86	87	67·9	·534	8
64	62	70	72	76	81	86	88	88	89	90	77·3	·628	9
69	68	73	73	74	72	76	81	81	81	85	78·4	·629	10
70	70	72	77	79	79	81	81	83	84	83	77·9	·632	11
7 ·	72	72	74	75	75	75	76	75	77	77	75·5	·647	12
67	70	73	75	79	79	7 ·	76	76	75	75	75·8	·631	13
51	53	60	60	57	54	56	59	55	51	61	65·5	·520	14
48	50	51	52	57	61	63	65	51	51	59	56·3	·437	15
51	52	58	63	70	72	72	70	74	78	71	6 ·9	·511	16
57	63	6 ·	66	75	77	77	77	82	78	79	71·6	·588	17
56	54	61	66	73	77	71	73	76	81	85	72·2	·611	18
71	72	70	73	77	83	83	82	84	89	90	76·7	·645	19
61	61	61	62	68	66	68	70	70	75	80	70·2	·606	20
71	73	72	71	75	79	82	84	86	89	88	80·5	·672	21
63	63	6 ·	67	6 ·	64	6 ·	72	76	71	71	75·7	·641	22
58	61	6	64	73	77	77	73	79	84	83	72·0	·622	23
54	57	57	62	68	72	72	72	76	67	66	65 ·0	·633	24
56	60	56	60	67	71	73	76	78	78	70	66·5	·628	25
57	60	62	64	67	68	69	73	73	81	82	66·3	·632	26
42	47	60	66	73	77	81	83	86	87	85	78·1	·692	27
82	73	77	73	78	81	83	82	84	87	85	78·9	·715	28
69	68	71	67	64	63	61	66	72	80	81	76 7	·708	29
57·6	59·4	61 6	63·9	67·7	70 0	71·1	72·1	73·0	74·8	75·0	68 3	·567	Mean.
"	"	"	"	"	"	"	"	"	"	"	"		*Mean Vapour Pressure in inches o. mercury.
·570	·589	·603	·606	·607	·600	·598	·592	·582	·580	·570	·557		

* Computed from mean temperatures and mean relative humidities.

MARCH. (THE FIGURES REPRESENT PERCENTAGES.)

Date.	Hours.												
	0—1	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12	12—13
1	82	85	85	84	77	72	71	70	70	51	47	50	56
2	76	75	74	70	58	56	58	54	50	56	57	54	53
3	77	80	79	76	73	71	66	66	60	58	60	63	61
4	84	81	81	83	85	86	86	83	78	73	76	71	65
5	74	73	79	81	81	81	82	81	78	73	64	63	62
6	75	74	72	72	73	73	72	73	71	66	62	62	56
7	59	57	64	68	67	67	6.	52	51	54	42	45	48
8	60	62	63	69	70	73	75	72	69	65	63	61	61
9	88	84	83	82	85	78	70	61	68	61	59	59	57
10	72	74	81	79	70	60	66	64	50	41	48	54	54
11	76	79	81	83	79	77	79	74	65	55	54	56	58
12	80	80	79	83	86	82	82	76	69	67	67	68	66
13	76	76	77	79	83	84	86	83	78	76	70	69	68
14	90	90	91	91	90	90	90	85	80	79	74	74	73
15	87	88	88	86	87	86	81	80	76	73	66	69	61
16	80	82	82	84	86	87	89	82	78	75	75	71	73
17	90	91	90	90	90	89	89	86	81	77	75	72	71
18	86	87	86	86	87	89	90	86	83	76	72	69	68
19	80	79	78	78	74	76	83	80	74	70	64	62	61
20	82	81	83	81	72	67	70	70	68	63	58	62	63
21	79	80	83	80	78	72	78	70	62	60	57	59	61
22	88	87	87	9"	87	88	88	85	80	77	66	65	66
23	87	87	87	87	87	86	86	82	78	74	71	70	69
24	83	83	84	85	86	86	84	82	75	72	70	68	68
25	84	84	80	73	73	72	71	62	60	54	58	58	61
26	74	74	73	66	61	61	65	62	51	50	59	57	53
27	73	67	69	71	76	77	79	75	72	74	76	73	69
28	82	82	81	81	81	86	83	81	76	74	72	72	70
29	86	85	84	86	86	86	85	83	77	71	69	67	67
30	81	83	86	85	85	87	87	85	81	77	73	70	69
31	78	77	77	78	79	79	78	76	77	77	75	72	66
Mean .	79·6	79·6	80 2	80·1	79·1	78·2	78·4	75·0	70·8	67·0	64·3	73·6	62·5
*Mean Vapour Pressure in inches of mercury.	·728	·720	·714	·703	·685	·669	·670	·672	·687	·696	·701	·712	·723

APRIL.

1	83	86	84	82	80	80	80	71	71	73	68	70	68
2	84	81	82	83	84	85	83	79	76	73	72	70	70
3	84	85	81	82	82	82	83	80	76	70	71	71	68
4	84	85	83	83	83	83	83	79	80	79	73	74	73
5	82	79	75	81	82	82	82	79	74	69	64	58	54
6	77	77	79	81	84	84	85	83	79	76	71	66	58
7	71	73	74	76	76	76	77	76	72	70	68	67	67
8	78	79	78	78	79	78	77	75	70	66	65	66	66
9	79	78	78	77	75	76	8'	77	71	68	64	59	58
10	82	84	86	85	84	88	88	84	79	76	68	64	66
11	86	86	87	85	87	86	83	83	81	76	67	67	62
12	79	79	77	77	78	83	84	80	73	73	71	63	61
13	78	79	79	79	81	82	84	80	74	73	70	67	64
14	68	70	71	67	70	68	68	64	60	58	55	53	52
15	73	76	77	80	85	80	80	75	68	68	61	59	59
16	78	79	78	78	82	82	82	79	75	72	68	62	62
17	78	77	77	77	77	78	75	71	68	66	64	63	63
18	81	79	77	77	76	74	76	72	68	64	63	59	60
19	73	72	75	77	77	77	78	75	67	63	55	57	55
20	69	70	70	71	72	76	76	74	69	65	64	61	60
21	74	74	76	74	76	78	77	70	58	57	57	57	57
22	77	76	78	78	81	82	82	77	72	64	61	62	61
23	83	79	80	83	84	85	86	80	73	68	67	67	67
24	81	83	83	82	84	86	85	81	77	73	69	67	67
25	83	82	84	84	86	86	89	79	75	72	69	67	67
26	78	77	78	80	81	82	82	78	74	72	70	67	67
27	79	81	82	83	83	83	84	81	77	74	71	69	66
28	83	83	84	83	85	86	85	82	79	77	74	73	71
29	81	81	78	79	81	84	83	79	77	78	75	72	67
30	85	80	87	87	89	87	88	83	79	79	78	71	68
Mean .	79·2	79·2	79·3	79·6	80·7	81·4	81·9	77·5	73·0	70·2	67·2	64·9	63·5
*Mean Vapour Pressure in inches of mercury.	·850	·839	·820	·824	·825	·826	·842	·846	·840	·843	·841	936	·839

*Computed from mean temperatures and mean relative humidities.

MARCH. (THE FIGURES REPRESENT PERCENTAGES.)

Hours.												Mean.	*Mean Vapour Pressure.	Date.
13—14	14—15	15—16	16—17	17—18	18—19	19—20	20—21	21—22	22—23	23—24				
52	49	47	48	53	58	62	60	65	71	74		64·1	·617	1
59	59	54	52	53	61	57	70	69	72	75		61·7	·583	2
59	58	60	61	65	71	76	79	83	84	85		69·6	·638	3
63	61	61	62	66	66	69	71	72	73	71		74·2	·682	4
60	60	60	62	65	65	67	69	71	72	73		70·7	·619	5
55	55	58	54	51	53	51	55	61	65	62		63·9	·631	6
50	51	49	49	48	50	53	54	53	61	61		54·7	·460	7
59	57	58	61	67	73	75	79	82	87	87		69·7	·611	8
55	56	61	66	69	67	69	69	72	75	71		69·5	·635	9
58	62	65	68	69	69	69	72	76	76	71		66·8	·617	10
63	62	63	67	70	72	75	78	76	73	75		71·3	·677	11
66	66	66	64	67	73	76	78	76	76	77		73·7	·710	12
69	68	70	69	71	78	81	84	86	86	88		77·3	·764	13
72	70	70	71	73	78	79	83	85	85	86		81·2	·814	14
67	67	64	68	67	66	67	74	78	76	78		71·5	·782	15
72	72	73	75	80	84	85	87	86	88	89		80·5	·855	16
69	64	68	70	76	78	80	81	83	85	86		80·4	·832	17
63	63	60	50	70	74	72	70	71	74	80		76·0	·774	18
61	61	61	62	67	72	74	76	77	80	81		72·0	·717	19
62	62	64	67	68	70	72	74	75	78	78		70·3	·711	20
61	61	54	58	64	70	73	77	80	83	85		70·4	·727	21
62	59	62	66	71	75	71	76	79	83	86		76·6	·776	22
64	62	62	62	63	68	70	74	79	80	82		75·7	·771	23
59	57	58	71	74	74	75	78	80	83	76·5			·780	24
60	55	54	54	56	58	56	59	54	64	72		63·9	·729	25
53	55	57	62	64	68	69	72	71	68	72		63·2	·721	26
70	65	64	64	65	71	73	76	78	79	81		72·3	·781	27
68	67	67	70	76	79	80	82	84	83	84		77·4	·836	28
67	69	70	69	69	79	76	78	79	80	80		76·9	·817	29
68	72	71	68	67	72	73	71	69	71	76		76·1	·805	30
67	68	67	72	77	79	81	80	81	82	81		76·0	·824	31
62·8	62·1	62·2	63·6	66·3	70·0	71·5	73·6	75·1	77·1	78 4		71·7	·717	Mean.
"	"	"	"	"	"	"	"	"	"	"		"		*Mean Vapour Pressure in inches of mercury.
·730	·722	·715	·714	·709	·714	·715	·726	·728	·733	·731		·709		

APRIL.

67	69	70	73	77	81	83	83	84	84	84	77·1	·830	1
70	70	70	72	76	79	81	80	82	84	83	77·0	·879	2
67	69	71	72	74	77	79	80	80	82	84	77·0	·9 8	3
73	68	59	62	72	77	78	81	80	78	78	77·0	·910	4
59	61	64	70	68	70	72	71	74	75	76	71·8	·874	5
63	61	61	73	56	62	63	67	71	71	69	69·4	·847	6
66	67	67	70	74	77	78	78	78	78	78	73·1	·870	7
66	66	66	66	69	72	74	76	76	76	77	72·5	·841	8
58	59	58	61	64	71	74	77	78	80	80	70·8	·782	9
64	62	64	67	73	81	79	81	83	86	84	77·4	·880	10
60	56	58	61	63	67	69	71	73	75	76	73·8	·878	11
57	54	48	49	55	58	63	66	67	73	75	68·5	·852	12
58	57	53	54	56	60	61	64	66	64	65	64·8	·824	13
52	54	58	62	67	74	75	77	79	81	82	66·6	·763	14
59	59	59	64	68	73	76	77	79	79	71·0	71·0	·818	15
61	59	61	64	68	75	77	76	78	79	78	73·0	·830	16
62	62	64	66	69	73	75	77	77	74	74	71·1	·804	17
59	55	62	63	69	69	67	65	67	68	70	68·8	·788	18
53	57	57	59	63	68	71	69	70	70	69	67·2	·742	19
61	62	62	63	65	68	69	69	72	71	73	68·0	·747	20
58	60	63	66	68	71	73	74	74	77	77	68·6	·768	21
60	64	66	70	74	79	80	81	82	81	82	73·8	·834	22
68	69	68	74	77	78	77	74	83	83	82	76·7	·879	23
66	67	69	72	77	81	82	82	83	83	82	77·6	·884	24
63	61	63	65	66	67	69	71	71	72	76	73·7	·833	25
66	64	66	68	72	75	76	75	76	77	74·0	74·0	·845	26
66	65	66	67	69	72	76	81	83	82	75·9	75·9	·869	27
68	67	67	72	76	77	78	79	81	81	81	78·0	·905	28
66	66	69	72	74	75	78	79	81	83	83	76·7	·825	29
66	71	74	72	74	77	80	82	83	83	82	79·6	·926	30
62·5	62·5	63·3	65·6	69·1	72·8	74·4	75·6	76·9	77·6	77·9	73·1	·843	Mean.
"	"	"	"	"	"	"	"	"	"	"	"		*Mean Vapour Pressure in inches of mercury.
·837	·834	·831	·835	·838	·841	·846	·846	·848	·849	·850	839		

*Computed from mean temperatures and mean relative humidities.

MAY. (THE FIGURES REPRESENT PERCENTAGES.)

Date.	Hours.												
	0—1	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12	12—13
1	82	86	85	84	83	85	86	84	78	75	72	72	68
2	83	82	84	85	85	86	86	79	73	70	67	66	64
3	80	81	82	83	84	83	85	80	76	72	71	69	67
4	79	79	81	81	79	78	81	80	77	76	75	75	73
5	75	79	81	81	81	82	8	79	76	71	69	69	67
6	82	83	85	83	84	86	81	79	71	69	66	66	65
7	81	79	81	83	83	82	81	75	74	71	67	66	64
8	79	82	82	81	80	79	79	77	75	72	70	68	65
9	80	80	79	82	83	83	77	74	73	69	70	67	66
10	82	83	83	84	86	85	85	81	74	73	71	68	66
11	82	81	81	80	80	21	78	76	71	69	64	65	63
12	75	75	75	74	76	73	74	70	68	66	63	61	61
13	71	71	71	72	73	72	71	68	66	62	59	58	58
14	61	60	59	60	63	64	68	64	67	64	54	55	56
15	64	64	64	65	63	63	62	63	58	57	55	53	53
16	64	64	64	63	62	63	61	58	56	56	54	53	55
17	67	68	69	69	69	67	65	61	60	57	55	53	52
18	67	67	69	67	69	69	70	65	66	61	60	57	56
19	71	69	72	72	71	70	71	69	66	64	61	63	61
20	78	78	78	81	83	83	81	80	75	71	69	67	66
21	79	79	79	78	83	84	82	79	77	73	69	70	69
22	83	81	81	79	80	81	78	77	74	71	67	66	65
23	81	79	77	76	77	76	76	73	68	65	64	61	61
24	72	71	74	75	75	76	73	70	68	66	64	63	63
25	74	74	76	75	74	74	73	71	67	65	62	61	61
26	71	71	71	71	70	71	69	66	91	59	60	60	58
27	69	68	70	70	71	70	69	69	65	60	58	60	60
28	74	76	76	74	75	74	71	71	68	67	66	66	61
29	70	71	72	73	73	75	73	72	70	67	65	64	61
30	73	71	71	72	73	74	71	70	69	66	63	6	61
31	70	71	72	73	74	71	70	68	65	61	60	60	59
Mean	74·9	75·0	75·6	75·8	76·1	76·1	74·9	72·2	69·0	66·2	64 3	63·3	62·2
*Mean Vapour Pressure in inches of mercury.	"	"	"	"	"	"	"	"	"	"	"	"	"
	·849	·845	·841	·838	·837	·847	·844	·853	·853	·853	·852	·861	·862

JUNE.

1	70	71	71	70	69	70	68	68	65	65	63	61	59
2	68	68	69	70	71	73	72	68	67	64	60	58	56
3	71	72	72	71	73	75	74	72	67	64	60	58	59
4	71	72	72	74	74	74	73	70	67	67	65	65	62
5	72	74	74	75	75	75	70	70	68	68	67	65	66
6	74	75	75	76	76	76	7.	78	79	80	78	72	69
7	73	72	75	74	75	76	76	72	68	65	65	63	62
8	82	79	79	79	79	79	76	74	75	75	69	67	64
9	80	79	78	79	77	79	79	77	71	69	66	61	63
10	76	77	8	81	66	89	90	90	91	90	88	87	89
11	88	87	88	88	89	90	91	89	8.	85	83	85	10
12	89	92	94	93	93	95	92	91	92	92	90	86	86
13	94	94	94	95	95	95	95	95	95	93	89	93	90
14	93	93	93	89	86	85	84	84	79	79	78	79	77
15	81	81	83	81	80	80	81	80	80	79	76	74	75
16	79	79	79	81	79	8	79	78	77	75	82	78	76
17	80	80	79	80	79	79	78	75	74	74	73	71	70
18	77	77	77	78	79	78	78	77	74	72	72	70	69
19	80	80	81	81	80	79	80	76	75	75	72	73	7.
20	87	87	87	87	87	86	86	87	90	91	90	92	91
21	83	86	84	83	81	81	81	81	8.	77	75	78	78
22	87	87	88	88	87	89	87	89	89	83	80	79	8.
23	80	87	83	84	84	86	88	85	83	79	92	90	51
24	83	85	85	84	85	81	81	85	84	82	81	76	75
25	84	87	85	84	88	86	85	85	83	81	78	83	8.
26	84	87	91	91	92	91	90	91	89	87	84	83	78
27	93	88	83	83	85	87	84	83	80	79	76	75	76
28	81	80	81	82	81	81	82	90	88	86	83	80	78
29	81	80	81	81	86	90	91	90	87	86	91	93	13
30	89	86	86	82	80	82	86	87	81	85	85	87	87
Mean	80·8	81·1	81·5	81·4	81·0	82·1	82·0	81·4	79·5	78·4	76·7	75·5	75·2
*Mean Vapour Pressure in inches of mercury.	"	"	"	"	"	"	"	"	"	"	"	"	"
	0 4	892	899	·890	·880	·886	·891	905	·913	920	·920	927	927

* Computed from mean temperatures and mean relative humidities.

MAY (THE FIGURES REPRESENT PERCENTAGES.)

Hours.											Mean.	*Mean Vapour Pressure.	Date.
13—14	14—15	15—16	16—17	17—18	18—19	19—20	20—21	21—22	22—23	23—24			
66	66	66	71	72	77	79	80	83	83	82	77·7	·919	1
63	64	66	67	71	73	77	79	81	81	81	75·5	·887	2
67	68	71	73	78	79	80	80	79	72	75	76·5	·905	3
71	69	70	70	73	76	76	76	78	78	75	76·0	·919	4
66	66	64	64	72	79	80	82	82	83	84	75·8	·922	5
64	64	65	67	71	75	78	77	79	78	80	76·1	·899	6
61	63	66	64	65	68	72	75	76	77	77	73·0	·874	7
61	63	64	64	67	72	74	75	75	77	78	73·5	·892	8
65	66	66	67	70	69	76	77	77	78	79	73·4	·890	9
66	65	66	68	72	76	78	79	77	77	79	76·0	·916	10
64	64	64	66	67	71	71	73	73	74	74	72·2	·890	11
61	63	62	66	66	68	69	70	70	73	74	68·9	·855	12
56	56	56	57	55	61	62	64	64	63	64	63·0	·760	13
59	56	58	59	59	63	64	66	63	65	64	59·6	·7·5	14
54	55	56	58	60	6	62	64	64	63	64	60·3	·730	15
54	55	55	59	61	63	66	65	66	67	66	60·5	·743	16
54	53	54	56	58	63	64	64	66	66	65	61·5	·748	17
55	55	55	59	63	67	68	69	71	71	70	64·4	·774	18
61	62	63	66	69	74	76	77	79	81	80	69·5	·832	19
68	69	67	68	70	76	79	79	77	80	80	76·1	·911	20
68	65	65	67	69	72	78	81	82	83	83	75·6	·926	21
66	66	67	71	75	78	77	76	76	76	78	74·7	·906	22
60	61	61	61	66	67	69	70	70	70	71	69·2	·834	23
63	63	64	66	68	70	71	72	74	71	73	69·4	·858	24
63	61	61	63	65	68	68	69	70	70	71	68·1	·839	25
60	62	61	62	64	63	68	69	68	69	68	66·6	·824	26
59	60	61	65	66	69	70	73	73	74	74	66·7	·843	27
60	61	60	63	67	71	72	73	73	71	71	69·2	·872	28
58	57	57	59	64	67	69	71	72	72	72	67·6	·868	29
58	57	58	60	62	67	66	68	70	69	70	66·7	·854	30
59	58	61	61	61	67	70	69	70	68	70	66·2	·845	31
61·6	61·7	62·3	64·3	66·7	70·2	71·9	72·9	73·4	73·6	74·0	69·9	·855	Mean.
" ·859	" ·860	" ·863	" ·863	" ·857	" ·857	" ·861	" ·859	" ·856	" ·854	" ·850	" ·852		*Mean Vapour Pressure in inches of mercury.

JUNE.

57	57	57	59	63	67	70	72	71	70	69	65·9	·831	1
57	56	58	59	64	65	66	68	69	70	72	65·4	·822	2
60	59	60	61	65	69	71	71	72	72	71	67·5	·862	3
61	60	61	63	68	67	70	69	69	71	72	67·0	·860	4
63	63	62	63	66	69	71	74	73	73	73	69·5	·899	5
63	61	62	62	66	68	71	70	71	70	72	71·7	·921	6
60	59	60	63	64	68	71	7	74	74	83	69·3	·913	7
70	66	64	65	67	71	72	74	75	77	79	72·3	·945	8
62	63	61	69	69	74	74	73	74	74	75	71·9	·933	9
86	83	81	81	83	83	83	86	88	89	88	84·4	·923	10
91	91	90	89	89	89	87	87	86	86	86	88·0	·935	11
91	93	94	93	93	93	93	93	93	93	91·8	93·1	·911	12
88	91	91	84	86	89	91	91	92	92	92	91·6	·894	13
76	78	77	79	79	81	81	81	81	80	81	82·3	·970	14
74	75	74	74	76	78	79	78	78	78	78	78·1	·947	15
74	74	77	75	79	76	77	77	79	79	79	76·3	·919	16
69	69	70	70	72	74	73	74	75	76	75	74·5	·857	17
70	70	69	70	73	76	77	83	80	79	77	75·1	·879	18
74	74	73	74	76	78	81	82	84	86	87	76 2	·887	19
91	91	89	89	87	85	85	85	87	85	85	87·7	·972	20
73	77	79	78	77	77	78	81	83	85	87	80 3	·870	21
83	81	76	80	83	80	76	83	84	85	82	83·5	·914	22
78	78	76	76	77	77	77	79	83	83	81	81·3	·907	23
74	75	76	80	82	81	79	87	87	81	83	81·7	·917	24
85	83	84	83	86	86	82	84	81	81	82	84·0	·910	25
75	74	73	74	76	77	77	79	79	79	82	82·6	·931	26
74	73	73	76	76	77	77	78	79	81	79	79·2	·927	27
76	73	81	78	77	83	85	85	83	81	81	81·7	·922	28
92	91	91	91	91	92	93	92	90	90	89	88·8	·893	29
91	90	87	87	86	85	86	87	87	86	83	85·6	·878	30
74·5	74·2	74·2	74·8	76·4	77·9	78·7	79·9	80·3	80·3	80·5	78·7	·904	Mean.
" ·921	" ·924	" ·921	" ·910	" ·906	" ·903	" ·901	" ·909	" ·910	" ·907	" ·904	" ·907		*Mean Vapour Pressure in inches of mercury.

* Computed from mean temperatures and mean relative humidities.

JULY. (THE FIGURES REPRESENT PERCENTAGES.)

Date.	Hours.														
	0—1	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12	12—13	13—14	
1	83	83	84	84	84	86	85	82	80	79	78	78	78	75	
2	84	83	82	81	81	81	83	81	87	89	83	86	86	92	
3	94	95	96	93	94	94	94	96	95	95	94	93	93	89	
4	93	92	92	91	91	93	92	91	93	23	03	92	91	90	
5	94	92	91	91	91	91	98	87	87	86	85	82	83	84	
6	86	85	86	85	85	87	86	84	82	80	80	80	77	77	
7	83	85	83	86	86	86	85	83	82	78	78	76	76	75	
8	83	82	85	85	85	87	87	84	81	79	78	76	75	72	
9	81	81	81	82	81	80	84	82	81	77	77	76	76	75	
10	81	82	83	89	87	88	84	85	83	81	80	79	76	74	
11	86	85	89	91	91	90	89	90	85	87	87	90	87	87	
12	89	89	88	87	88	87	88	90	93	93	93	94	94	94	
13	89	87	86	86	85	85	85	83	85	84	84	80	78	79	
14	81	81	82	84	85	83	84	83	81	79	78	77	74	78	
15	81	82	82	82	85	83	82	82	81	79	77	76	74	72	
16	81	81	86	87	87	84	82	82	79	79	81	79	77	76	
17	81	82	82	83	85	82	85	80	79	78	76	76	80	76	
18	82	84	87	88	88	88	89	91	90	92	90	89	93	91	
19	91	92	91	91	92	93	93	93	94	92	91	92	93	91	
20	87	87	89	90	90	92	93	93	89	89	91	91	91	90	
21	89	89	91	90	89	91	91	90	91	86	85	83	83	80	
22	88	86	85	84	86	85	86	85	83	81	80	79	79	81	
23	87	87	89	87	86	86	86	85	85	81	82	84	87	82	
24	87	87	87	88	89	92	92	90	91	87	90	86	84	83	
25	93	91	87	87	88	89	90	88	87	86	86	83	84	83	
26	85	87	85	87	85	85	87	88	86	86	90	90	87	86	
27	86	86	85	87	85	86	85	86	87	85	82	83	85	82	
28	88	88	88	87	85	86	86	86	85	82	81	84	80	79	
29	85	86	87	86	86	85	87	86	87	85	82	85	82	83	
30	87	88	89	88	87	87	89	88	86	86	83	82	83	80	
31	85	84	85	83	84	84	84	85	83	81	81	81	85	82	
Mean . .	86·1	86·2	86·5	86·7	86·7	87·0	87·1	86·3	85·7	84·3	83·7	83·3	82·9	81·9	
*Mean Vapour Pressure in inches of mercury.	·894	·893	·896	·892	·889	·889	·896	·899	·908	·913	·912	·920	·922	·920	

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1	85	87	86	85	85	84	84	81	81	81	79	80	79	80	
2	85	85	83	85	83	84	85	84	81	81	79	77	77	80	
3	84	86	83	82	84	82	85	83	83	83	80	77	76	79	
4	83	86	85	85	85	85	86	85	81	79	78	78	79	77	
5	83	82	84	83	86	86	85	83	81	78	76	76	76	76	
6	82	82	81	80	84	83	82	81	79	76	75	74	74	74	
7	81	80	82	82	82	85	83	80	81	80	77	75	75	73	
8	80	83	81	81	82	81	81	81	75	78	81	77	80	79	
9	85	84	86	87	83	85	84	83	83	82	81	81	78	78	
10	82	83	83	82	83	81	81	81	82	82	80	79	79	80	
11	82	82	83	84	84	82	83	85	81	81	78	77	76	76	
12	81	83	82	83	86	86	89	88	88	86	82	80	77	77	
13	83	82	84	84	86	84	91	89	88	85	82	80	78	76	
14	82	82	84	84	84	82	82	85	83	82	81	79	79	78	
15	85	83	83	83	81	81	80	79	79	78	76	75	74	74	
16	82	83	82	85	84	86	90	91	87	85	79	76	74	79	
17	84	83	84	86	85	90	92	92	86	82	79	77	77	79	
18	82	82	84	83	84	85	85	87	81	81	77	80	77	78	
19	82	82	83	80	83	84	84	84	78	76	76	76	75	72	
20	80	82	82	81	82	82	80	78	77	76	77	72	69	71	
21	78	74	81	80	82	84	82	76	77	75	73	71	72	71	
22	84	84	81	83	83	85	84	84	85	83	82	80	84	81	
23	84	81	87	84	82	85	88	88	83	81	78	77	79	81	
24	86	85	85	84	84	86	85	84	82	83	89	87	87	83	
25	91	92	91	93	90	89	92	93	93	89	87	93	97	93	
26	89	90	91	93	91	91	92	90	90	92	93	95	95	97	
27	90	90	89	91	91	89	89	90	90	94	94	92	93	93	
28	96	95	95	96	96	96	98	95	96	94	95	95	97	96	
29	91	92	92	93	93	93	92	91	92	91	93	93	93	92	
30	85	87	88	91	88	85	86	86	86	85	86	90	85	85	
31	89	88	87	84	86	88	89	96	87	85	83	81	78	77	
Mean . .	84·1	84·5	84·5	84·7	84·9	85·2	85·7	84·9	83·6	82·6	81·5	80·6	80·0	79·7	
*Mean Vapour Pressure in inches of mercury.	·848	·852	·850	·849	·845	·846	·853	·859	·869	·878	·883	·885	·884	·888	

*Computed from mean temperatures and mean relative humidities.

JULY. (THE FIGURES REPRESENT PERCENTAGES.)

Hours.											Mean.	Mean Vapour Pressure in Inches of Mercury.	Date.
14—15	15—16	16—17	17—18	18—19	19—20	20—21	21—22	22—23	23—24				
												"	
74	75	76	77	80	87	81	79	83	83		80·7	·927	1
89	88	90	90	90	89	92	92	93	94		86·9	·891	2
91	90	91	90	91	92	93	93	93	93		92·8	·897	3
90	91	87	87	91	92	91	94	93	93		91·5	·965	4
86	89	88	86	83	84	83	86	85	85		87·0	·831	5
77	78	77	78	79	81	81	82	84	84		81·7	·732	6
75	75	74	76	78	80	81	81	83	82		80·2	·921	7
72	74	72	73	76	77	78	79	79	81		79·2	·913	8
74	73	72	74	75	79	78	79	81	81		78·3	·911	9
72	76	79	81	81	83	85	83	80	81		81·2	·924	10
88	86	85	85	85	84	83	83	86	87		85·8	·911	11
94	97	91	90	92	91	90	90	89	91		90·9	·899	12
76	76	78	79	79	80	79	81	81	81		81·9	·917	13
77	75	76	77	78	80	79	77	80	81		79·6	·911	14
71	72	75	77	77	79	79	79	79	81		78·6	·906	15
76	78	75	77	83	83	83	80	80	80		80·7	·900	16
81	80	79	85	86	85	82	86	85	85		81·6	·852	17
90	91	91	89	92	92	89	87	89	88		89·2	·882	18
89	86	85	88	87	88	90	91	91	88		90·5	·886	19
89	88	86	87	85	85	87	93	93	93		89·6	·891	20
82	84	86	86	89	90	84	88	86	87		86·7	·872	21
87	82	83	85	85	86	86	86	89	89		84·5	·898	22
84	83	83	85	85	85	85	86	85	86		85·1	·904	23
83	80	82	85	87	88	91	93	92	93		87·8	·888	24
85	84	84	84	84	84	86	86	86	87		86·3	·911	25
85	85	87	87	87	85	86	87	85	85		86·3	·885	26
85	85	79	84	84	85	84	84	84	84		84·4	·871	27
81	80	80	81	80	81	83	85	85	86		83·5	·862	28
83	81	79	83	83	85	86	86	86	88		84·7	·883	29
79	81	83	85	85	85	86	86	84	86		84·8	·889	30
79	79	81	81	83	84	85	84	84	85		83·0	·891	31
82·1	82·0	81·7	83·0	84·0	84·6	84·6	85·3	85·7	86·2		84·7	·900	Mean.
"	"	"	"	"	"	"	"	"	"		"		*Mean Vapour Pressure in inches of mercury.
·919	·911	·900	·899	·892	·895	·900	·892	·893	·896		·901		

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85	87	83	84	84	83	84	86	85	86	83·5	·885	1
79	77	78	80	83	83	84	85	83	81	81·8	·886	2
78	78	79	78	82	83	81	82	83	81	81·4	·857	3
76	76	76	79	80	81	82	83	83	84	81·3	·875	4
75	74	75	77	81	79	81	80	82	82	79·0	·871	5
72	72	74	80	80	79	81	78	80	84	78·8	·857	6
72	71	73	74	75	78	80	78	77	78	78·0	·848	7
74	74	78	77	78	80	87	88	77	85	80·0	·836	8
77	79	83	85	83	84	83	84	83	83	82·6	·871	9
76	76	75	77	77	79	81	82	82	85	80·3	·870	10
76	75	75	79	79	78	80	81	80	84	80·2	·896	11
76	75	82	81	84	82	83	83	83	81	82·4	·873	12
78	77	77	79	83	85	86	85	82	82	83·1	·872	13
78	78	77	80	81	80	78	80	84	84	81·1	·885	14
75	74	72	73	76	79	79	74	79	81	78·5	·858	15
81	86	83	81	81	82	82	83	84	84	82·0	·861	16
77	77	80	79	79	78	81	83	83	82	82·2	·871	17
77	77	77	73	73	71	79	81	82	81	70·9	·849	18
72	72	71	73	77	78	79	80	82	81	78·3	·859	19
72	75	77	77	74	75	76	76	77	78	76·9	·895	20
68	67	69	72	71	74	76	77	77	77	75·2	·857	21
82	80	76	82	84	86	85	85	84	86	83·0	·882	22
79	77	76	79	83	84	84	83	83	85	82·2	·871	23
86	81	81	84	84	83	85	83	83	88	83·9	·883	24
86	82	85	89	85	90	86	86	88	87	84·6	·839	25
95	96	93	93	90	91	92	91	92	91	92·2	·826	26
94	95	95	96	96	96	95	95	95	96	95·8	·865	27
95	95	95	95	94	94	94	93	93	93	94·9	·885	28
93	92	89	89	88	87	88	89	88	91	90·8	·872	29
83	83	84	85	86	86	88	88	89	90	86·5	·850	30
79	81	89	89	88	89	88	90	91	92	86·2	·850	31
79·3	79·3	79·9	81·3	81·9	82·5	83·3	83·5	83·7	84·6	82 8	·860	Mean.
"	"	"	"	"	"	"	"	"	"	"		*Mean Vapour Pressure in inches of mercury.
·879	·871	·862	·853	·845	·846	·851	·851	·847	·856	·861		

*Computed from mean temperatures and mean relative humidities.

RELATIVE HUMIDITY, 1923.

SEPTEMBER. (THE FIGURES REPRESENT PERCENTAGES)

Date.	Hours.													
	0—1	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12	12—13	13—1
1	92	91	91	89	89	89	87	86	85	85	84	81	80	80
2	83	84	85	85	85	85	87	88	85	84	82	77	75	72
3	83	83	84	84	85	84	85	83	80	77	76	74	73	71
4	79	78	78	77	77	78	78	77	73	70	69	67	67	67
5	79	80	81	80	84	86	87	87	79	76	78	77	71	66
6	90	80	78	80	80	81	81	86	84	79	77	74	69	69
7	79	78	82	82	82	81	82	80	76	73	72	70	70	71
8	84	83	83	82	82	82	82	83	78	77	75	73	68	71
9	84	84	84	82	81	82	83	82	77	73	73	71	70	68
10	89	90	88	88	88	88	87	85	84	79	78	77	74	84
11	85	84	88	88	89	88	88	84	85	81	78	77	75	72
12	89	89	89	83	88	88	91	91	91	91	90	90	90	87
13	88	91	91	91	91	93	92	89	92	92	91	89	88	81
14	86	87	86	88	91	92	92	89	86	85	83	78	75	73
15	84	82	86	91	91	91	91	9	88	89	87	83	85	83
16	89	9	90	91	91	9.	84	90	87	86	89	88	88	85
17	94	94	93	93	93	92	92	93	93	92	9.	89	91	92
18	91	92	9.	93	93	94	94	93	92	92	91	89	89	86
19	92	92	93	92	91	91	91	92	91	94	93	9	93	87
20	92	91	91	91	91	93	91	91	88	86	87	88	93	92
21	91	93	91	94	93	93	93	92	92	91	92	89	87	86
22	93	93	92	93	93	93	92	93	93	91	90	90	86	81
23	93	93	92	92	92	92	92	91	88	90	89	84	90	91
24	93	92	93	93	93	92	92	91	89	88	84	79	77	77
25	84	86	88	86	86	87	89	89	85	84	81	80	76	81
26	98	91	92	91	91	91	91	91	89	85	82	78	75	73
27	86	86	81	85	86	86	86	86	82	81	76	74	73	71
28	82	81	81	82	86	86	88	86	82	81	76	75	73	71
29	82	8.	82	82	83	83	84	83	84	83	87	85	81	85
30	89	91	9.	91	91	91	92	9.	91	90	87	83	83	82
Mean . .	86·4	86·6	87·1	87·3	87·9	88·0	88·3	87·9	85·7	84·3	82·8	80·7	79·5	78·5
*Mean Vapour Pressure in inches of Mercury.	·822	·824	·828	·819	·822	·823	·831	·844	·848	·836	·857	·832	·853	·846

OCTOBER.

1	88	89	90	91	91	92	93	92	90	86	83	81	79	79
2	91	91	91	91	91	90	91	93	84	77	73	71	69	68
3	76	72	73	75	74	73	82	89	89	87	86	81	76	75
4	81	81	82	82	84	83	83	83	82	81	81	84	84	79
5	86	86	86	86	86	85	84	88	83	79	77	76	76	78
6	87	87	87	87	88	88	90	87	84	81	79	77	77	75
7	88	89	89	90	90	90	90	89	84	84	84	80	78	77
8	87	85	86	88	88	90	90	90	86	82	81	81	78	76
9	80	82	82	82	84	85	83	85	81	79	78	78	72	72
10	90	90	90	90	90	90	91	89	84	80	76	76	74	69
11	89	87	89	9.	91	91	91	89	86	82	78	77	75	74
12	88	88	88	89	89	90	90	88	85	82	81	79	76	74
13	86	87	84	87	89	91	91	93	86	84	82	81	80	78
14	90	91	9.	91	91	91	91	89	83	80	78	72	72	72
15	89	90	89	87	86	89	87	93	71	72	66	67	73	
16	88	90	92	89	89	89	91	89	83	77	78	55	60	61
17	87	88	89	88	83	83	82	80	77	75	72	71	72	76
18	79	79	85	86	88	88	86	84	77	73	69	64	64	67
19	89	88	89	89	91	91	91	89	88	89	87	74	71	71
20	80	82	84	84	84	89	86	87	84	78	74	64	66	64
21	81	79	80	78	79	78	71	72	72	67	62	56	42	41
22	51	52	49	57	57	70	68	84	61	59	57	52	48	52
23	80	81	76	76	76	78	80	80	77	71	72	75	75	72
24	88	90	90	91	90	91	9.	89	84	80	74	76	77	77
25	87	86	86	86	84	85	86	85	83	79	75	75	77	77
26	86	87	86	84	83	86	91	91	90	86	84	83	80	81
27	87	83	90	89	88	89	91	88	85	80	78	69	64	67
28	82	81	82	84	84	85	86	84	84	78	76	73	74	74
29	89	90	87	87	86	86	87	86	82	77	76	78	77	77
30	89	89	90	91	88	88	86	85	84	81	77	77	77	79
31	89	87	88	86	84	82	81	80	78	73	72	69	67	68
Mean . .	84·6	84·9	85·4	85·5	85·6	86·4	86 7	85·8	82·7	78·9	76·0	73·4	71·9	72 2
* Mean Vapour Pressure in inches of Mercury.	·854	·848	·845	·837	·833	·832	·842	857	·865	·866	·873	·862	·868	·870

*Computed from mean temperatures and mean relative humidities.

SEPTEMBER. (THE FIGURES REPRESENT PERCENTAGES.)

Hours.										Mean.	Mean Vapour Pressure.*	Date.
14—15	15—16	16—17	17—18	18—19	19—20	20—21	21—22	22—23	23—24			
79	79	82	80	82	82	81	81	82	82	84·1	·840	1
73	71	71	72	75	77	78	80	82	82	79·9	·816	2
71	70	70	73	75	76	80	80	78	78	78·0	·795	3
66	65	65	67	70	72	76	78	79	79	72·9	·743	4
67	66	68	69	72	74	75	78	78	78	76·6	·765	5
69	68	70	73	77	75	76	77	78	80	76·7	·702	6
69	71	68	78	89	80	80	80	80	81	76·9	·801	7
72	70	73	74	76	75	81	86	82	83	77·9	·807	8
66	68	68	72	71	73	74	85	89	90	77·9	·797	9
82	84	89	91	92	87	86	86	85	83	84·3	·815	10
73	72	71	72	74	72	74	77	78	80	79·6	·819	11
82	84	82	81	81	87	97	87	87	86	86·3	·829	12
81	70	82	86	80	81	84	86	86	85	87·6	·844	13
71	70	74	74	76	77	70	81	82	82	81·5	·829	14
81	78	80	80	81	84	85	86	88	89	85·6	·832	15
88	91	89	88	90	92	93	93	93	93	89·0	·827	16
93	93	94	93	94	94	91	92	92	92	92·6	·840	17
86	84	89	91	92	87	86	86	85	83	84·3	·815	18
81	84	84	85	84	89	89	91	91	92	90·1	·862	19
91	88	89	90	90	91	94	91	93	93	90·6	·853	20
86	88	93	92	91	88	88	91	9.	92	91·0	·814	21
80	81	84	82	84	85	89	90	91	92	88·7	·869	22
89	91	89	88	91	90	90	91	91	91	90·4	·848	23
75	74	74	76	77	78	81	83	82	80	78·8	·745	24
86	80	81	83	89	91	92	92	92	92	86·7	·856	25
72	72	73	74	76	76	78	78	78	82	82·1	·842	26
71	73	72	74	76	74	78	78	79	80	73·7	·701	27
72	72	75	76	77	76	79	80	81	81	79 2	·8 2	28
88	89	86	96	85	86	86	88	89	90	86·2	·869	29
79	79	79	83	86	86	87	88	88	89	87·0	·919	30
78·0	77·9	78·3	79·6	81·1	81·9	83·3	84·9	85·2	85·7	83·6	·829	Mean.
·840	·831	·821	·813	·807	·807	·813	·824	·821	·823	·830		*Mean Vapour Pressure in inches of mercury.

OCTOBER.

74	75	77	81	83	85	87	88	89	89	85·8	·938	1
68	64	68	69	73	75	76	78	74	74	78·3	·811	2
74	75	74	77	78	81	82	82	85	84	81·0	·810	3
82	89	81	84	86	87	86	85	85	85	83·0	·845	4
77	80	83	85	85	86	88	88	88	87	83·4	·876	5
74	75	76	80	83	85	86	87	88	89	83·2	·893	6
77	79	77	79	80	81	84	85	84	81	81·0	·919	7
74	74	76	79	79	81	83	85	85	74	81·5	·976	8
73	72	72	76	77	81	85	81	87	88	81·3	·893	9
68	69	69	75	77	81	83	85	87	84	81·7	·912	10
72	72	74	75	74	76	81	83	85	87	82·0	·909	11
74	74	78	80	81	87	86	86	88	87	83 7	·919	12
78	74	80	84	87	89	87	89	89	91	84·2	·929	13
73	74	76	79	79	81	84	85	86	87	82·7	·813	14
76	77	78	76	81	85	88	89	90	84	82·1	·898	15
56	69	92	77	76	78	81	81	75	81	77·4	·878	16
76	77	79	83	87	89	89	93	89	80	81·0	·841	17
65	68	72	78	81	81	86	87	85	87	79·6	·890	18
73	76	78	78	78	74	76	80	90	80	81·3	·884	19
73	73	77	73	81	81	89	86	85	86	79·9	·883	20
56	51	64	61	70	72	77	84	50	52	64·9	·723	21
64	61	71	72	74	76	79	82	80	74	64 5	·690	22
69	72	73	81	83	84	86	87	86	86	78·6	·849	23
71	71	80	83	85	87	87	88	88	87	84·4	·912	24
77	76	78	81	85	86	86	86	86	87	82·4	·879	25
80	78	78	82	83	84	85	86	85	87	84·6	·839	26
67	67	69	71	74	73	75	74	82	82	74·7	·783	27
74	75	79	79	80	83	84	88	89	88	80·9	·808	28
77	79	80	83	83	86	87	86	86	88	83 3	·851	29
78	79	80	81	80	81	81	84	82	82	82 9	·853	30
69	7.	72	80	81	83	83	86	84	85	78 8	·824	31
72·6	73·2	75·3	78·3	80 3	81·0	83·3	83·9	83·6	83·9	80·7	·864	Mean
·878	·877	·876	·876	·876	·882	·885	·880	·860	·852	·862		*Mean Vapour Pressure in inches of mercury.

* Computed from mean temperatures and mean relative humidities.

NOVEMBER. (THE FIGURES REPRESENT PERCENTAGES.)

Date.	Hours.														
	0—1	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12	12—13	13—14	
1	89	90	91	91	89	88	88	85	81	77	65	57	46	52	
2	86	82	83	82	83	83	80	78	71	68	61	53	48	57	
3	88	87	84	80	80	77	76	75	71	65	55	57	54	56	
4	81	82	82	81	80	77	82	78	78	73	65	61	50	57	
5	86	86	86	86	86	84	85	81	73	63	62	53	50	44	
6	75	72	70	73	72	70	65	66	58	54	53	46	41	48	
7	78	76	77	77	77	76	79	76	72	64	56	51	44	44	
8	80	80	79	79	78	81	81	81	78	74	69	53	51	52	
9	81	85	86	86	84	84	78	77	75	71	65	54	56	54	
10	77	80	81	81	80	76	82	80	78	76	61	53	53	50	
11	83	83	86	81	81	81	81	81	76	69	67	56	47	42	
12	83	84	83	79	81	80	81	81	77	72	62	54	48	56	
13	77	75	77	78	73	76	68	75	60	67	63	62	56	52	
14	76	77	75	74	72	73	70	69	66	70	71	69	66	67	
15	86	84	80	80	84	84	84	78	77	75	70	69	49	72	
16	86	84	85	85	84	84	84	83	81	79	70	64	56	54	
17	85	86	81	81	84	84	85	84	80	79	69	62	51	58	
18	78	82	83	83	81	80	82	82	78	74	69	53	49	53	
19	79	84	84	83	82	83	82	82	77	68	67	48	45	62	
20	78	79	73	75	77	80	79	78	73	71	63	54	51	55	
21	76	75	73	61	66	64	73	75	74	70	64	54	46	48	
22	82	79	66	73	75	64	60	59	55	59	57	57	58	58	
23	77	70	79	77	79	72	74	69	65	70	62	57	56	55	
24	84	84	86	88	88	88	87	81	79	74	69	63	56	59	
25	82	81	82	81	82	84	81	83	78	74	67	58	51	53	
26	79	73	73	74	77	75	74	73	63	66	55	51	48	48	
27	73	74	75	72	70	74	74	72	71	66	59	56	48	42	
28	71	76	68	72	74	76	76	79	68	67	66	64	59	64	
29	70	72	74	76	79	75	76	74	70	69	62	60	59	58	
30	80	79	79	80	80	83	87	87	81	75	75	72	69	67	
Mean . .	80·2	80·2	79·8	79·2	79·3	78·6	78·5	77·4	73·½	69·9	63·3	56·9	52 0	54·6	
*Mean Vapour Pressure in inches of mercury.	·760	·752	·737	·724	·716	·704	·703	·712	·712	·719	·697	·666	·645	·684	

DECEMBER.

1	68	71	69	66	68	77	80	80	74	71	66	57	54	50	
2	71	76	78	80	70	73	76	74	63	60	61	57	53	52	
3	57	58	61	62	59	57	56	56	50	43	46	44	47	51	
4	70	70	68	67	64	62	63	64	65	62	60	61	61	62	
5	84	84	83	84	84	85	86	82	80	76	72	64	54	63	
6	84	84	84	83	81	84	84	82	80	77	69	64	62	61	
7	76	76	79	80	79	80	79	78	75	73	69	60	59	58	
8	72	69	71	74	75	76	75	76	76	70	63	67	70	70	
9	77	76	75	73	76	73	78	77	79	74	64	59	53	62	
10	77	76	76	79	78	80	83	80	78	73	65	58	58	67	
11	82	82	83	80	81	81	83	79	78	71	63	54	48	48	
12	72	73	76	8.	82	83	84	82	73	66	59	51	45	47	
13	76	74	79	79	82	81	82	81	78	73	60	52	59	58	
14	81	81	83	83	82	81	76	73	77	72	66	63	53	53	
15	70	72	79	74	72	70	71	70	74	68	66	56	54	56	
16	81	81	83	78	74	78	82	83	79	76	67	57	46	45	
17	69	65	70	73	72	63	62	59	61	61	52	45	33	37	
18	67	69	62	66	66	68	67	66	60	53	45	39	32	31	
19	62	67	64	67	65	63	61	59	56	54	45	36	34	33	
20	57	59	57	59	56	56	59	62	57	51	47	45	37	32	
21	67	71	70	68	68	66	56	53	48	47	40	35	33	31	
22	62	65	66	67	70	69	62	56	52	54	44	39	33	31	
23	63	64	64	61	61	64	65	64	59	55	48	42	34	31	
24	71	74	74	74	71	68	63	62	61	55	55	54	39	37	
25	74	79	73	70	69	72	72	75	73	63	75	56	46	49	
26	71	72	62	74	68	73	70	72	66	63	63	60	54	58	
27	76	81	80	76	76	75	79	76	80	74	79	69	62	59	
28	62	65	71	78	71	70	75	69	74	66	71	72	67	63	
29	83	81	76	74	73	76	76	77	71	64	63	61	59	61	
30	83	80	82	82	80	82	84	82	69	68	66	54	51	52	
31	46	47	47	47	47	45	46	43	38	38	39	37	37	40	
Mean . .	71·3	72·0	72·5	72·8	71·8	72·1	72·0	70·8	68·1	64·0	58·9	51·0	49·9	50·0	
*Mean Vapour Pressure in inches of mercury.	·585	·587	·585	·580	·562	·559	·564	·556	·569	·573	·567	·552	·513	·554	

*Computed from mean temperatures and mean relative humidities.

NOVEMBER. (THE FIGURES REPRESENT PERCENTAGES.)

Hours.											Mean.	Mean Vapour Pressure.*	Date.
14—15	15—16	16—17	17—18	18—19	19—20	20—21	21—22	22—23	23—24				
59	60	74	76	77	81	85	88	89	84		77·6	·855	1
67	68	69	73	73	73	81	84	83	86		73·7	·783	2
61	70	74	72	67	69	72	74	75	80		71·6	·746	3
61	64	70	74	77	81	83	84	82	82		74·4	·786	4
40	45	63	72	78	73	67	64	75	75		69·9	·767	5
62	59	61	69	77	77	71	68	67	73		64·3	·692	6
59	54	62	69	71	73	71	74	71	69		67·1	·702	7
61	62	68	73	74	77	77	80	78	82		72·5	·733	8
53	57	64	69	74	77	76	77	76	73		72·2	·735	9
48	54	62	68	72	74	76	77	82	82		71·0	·721	10
49	53	58	67	70	75	73	76	75	75		70·4	·715	11
58	62	71	74	75	76	79	83	81	77		73·2	·734	12
55	62	65	69	73	72	77	75	73	74		69·3	·692	13
70	73	75	77	79	82	82	83	80	86		74·3	·767	14
72	74	74	78	81	79	79	80	76	84		77·0	·805	15
55	54	63	71	79	83	81	82	82	82		75·5	·784	16
58	61	71	77	79	77	76	76	78	75		75·1	·801	17
66	69	70	74	75	72	75	73	71	71		72·6	·787	18
63	65	69	69	67	67	69	64	64	64		69·9	·757	19
56	57	69	71	73	75	72	70	70	78		69·8	·749	20
62	64	71	76	77	74	75	78	74	78		68·8	·729	21
63	66	71	71	73	74	73	76	71	72		67·2	·671	22
60	64	69	71	76	75	76	79	84	82		71·1	·766	23
63	64	64	67	72	75	77	78	78	79		75·1	·755	24
60	61	62	67	70	67	68	70	75	75		7.·5	·728	25
50	51	55	60	66	68	70	68	65	73		65·2	·671	26
44	46	48	60	67	67	64	73	70	66		62·8	·629	27
67	62	67	69	71	66	65	69	69	70		68·3	·652	28
58	59	62	64	67	69	69	69	69	68		67·7	·642	29
66	66	67	66	65	66	66	64	63	62		72·7	·662	30
58·2	60·9	66·3	70·3	72·8	73·5	74·4	75·2	75·0	75·8		71·1	·732	Mean.
·718	·734	·756	·767	·771	·766	·758	·748	·728	·723		·725		*Mean Vapour Pressure in inches of mercury.

DECEMBER.

48	51	54	60	62	63	63	68	68	68	64·9	·576	1
52	51	54	57	64	64	65	63	60	58	63·7	·659	2
54	56	59	60	63	64	66	68	66	65	67·3	·685	3
65	69	73	77	78	78	80	79	81	81	69·2	·618	4
67	67	72	74	78	81	80	78	77	78	76·4	·743	5
65	66	69	74	77	80	82	80	79	77	76·4	·756	6
61	63	72	76	76	74	74	70	76	75	72·6	·724	7
70	68	73	76	79	77	76	75	74	76	72·7	·721	8
70	71	77	78	80	78	74	72	70	71	72·6	·725	9
66	68	73	78	78	76	72	72	70	70	73·3	·756	10
54	58	64	69	73	67	70	70	73	70	69·9	·740	11
48	55	58	65	69	73	76	76	78	78	68·7	·698	12
58	57	61	66	69	76	77	77	71	64	70·4	·666	13
51	53	61	64	68	72	75	73	75	75	70·4	·666	14
61	63	66	71	72	74	79	75	77	80	69·6	·636	15
46	45	52	63	68	67	69	73	73	70	68·0	·610	16
35	40	44	51	55	6.	65	72	67	70	57·8	·535	17
42	45	55	61	56	61	61	60	60	62	57·4	·519	18
32	36	53	54	50	51	57	59	59	61	54·7	·493	19
27	34	41	48	52	54	60	62	64	69	51·9	·454	20
28	33	39	46	54	50	52	55	59	60	51·2	·435	21
25	25	36	42	51	56	53	51	56	57	52·3	·432	22
30	49	53	59	64	67	64	61	63	69	56·5	·472	23
45	49	51	57	61	66	67	62	66	68	60·3	·498	24
56	61	65	69	72	73	68	66	61	69	66·1	·559	25
59	63	66	73	76	75	73	73	73	75	67·9	·582	26
59	63	63	70	72	73	75	77	72	69	73·0	·635	27
60	58	63	70	73	75	79	79	79	81	70·5	·605	28
62	66	72	74	77	78	78	80	82	83	72·8	·616	29
44	46	46	48	53	59	60	58	61	61	63·4	·521	30
45	48	52	59	57	59	59	56	53	53	47·3	·342	31
51·3	54·3	59·3	64·2	67·1	68·4	69·7	69·5	68·7	69·5	65·1	·594	Mean.
·569	·590	·614	·631	·638	·635	·633	·614	·5·5	·576	·582		*Mean Vapour Pressure in inches of mercury.

* Computed from mean temperatures and mean relative humidities.

Notation :—H=High clouds (Ci, Ci-S) ; M=Medium clouds (Ci-Cu,

JANUARY.

Day.	Cloud Forms (coming from)									Cloud Amount (All Forms).						
	8½h.			12½h.			16½h.									
	H.	M.	L.	H.	M.	L.	H.	M.	L.	6h.	8h.	10h.	12½h.	14h.	16h.	22h.
1	..	..	..	‡	..	§	..	..	WSW	2	1	3	4	7	7	6
2	..	SW	..	..	SW	W	..	..	WSW	5	7	6	6	7	8	8
3	..	SW	..	§	WSW	..	SW	..	..	5	7	3	4	3	8	3
4	SW	..	..	SE	..	..	SW	..	..	3	4	4	4	3	4	4
5	..	..	..	..	§	..	..	..	..	0	0	1	5	0	5	1
6	‡	§	..	..	W	..	WSW	SW	..	0	2	6	8	0	8	0
7	‡	..	SW	..	SW	..	..	SW	..	1	8	6	7	9	8	6
8	ESE	..	..	..	WSW	..	SW	SW	..	8	5	5	8	7	7	7
9	..	..	§	W	..	§	..	..	..	6	8	8	3	4	6	6
10	§	..	..	W	..	..	..	W	..	4	2	2	2	1	0	1
11	SW	..	..	..	§	..	..	..	..	1	1	2	2	2	6	0
12	..	..	..	‡	..	..	..	..	..	2	2	3	0	2	0	0
13	W	§	..	..	§	..	..	SW	..	0	0	2	2	1	0	0
14	‡	..	..	..	..	..	..	..	..	1	1	0	3	4	0	0
15	..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	0
16	..	§	..	..	WSW	..	WSW	..	..	0	1	1	2	0	1	0
17	..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	0
18	..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	0
19	..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	0
20	..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	0
21	..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	0
22	..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	0
23	..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	0
24	..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	0
25	†	..	..	..	..	..	..	..	..	1	0	0	0	0	0	0
26	..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	0
27	§	..	..	§	..	..	..	..	..	0	1	2	1	1	0	0
28	..	..	..	..	SW	§	..	§	..	0	1	2	2	1	0	0
29	§	..	..	..	SW	..	..	..	§	0	1	0	4	0	0	0
30	..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	0
31	..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	0
Mean cloud amount.										1·3	1·4	1·6	1·8	2·0	2·0	1·1

MARCH.

1	..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	0
2	..	..	..	..	..	..	..	..	..	1	1	0	0	0	0	0
3	†	..	..	†	..	..	†	..	..	1	1	2	0	1	2	0
4	..	ESE	..	..	..	†	..	WNW	..	5	6	6	1	2	2	0
5	..	..	NW	..	..	§	..	..	..	6	6	3	1	0	0	0
6	..	..	..	..	..	..	..	..	..	2	4	0	0	0	0	0
7	..	..	..	..	..	..	..	..	..	2	0	0	0	0	0	0
8	..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	0
9	..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	0
10	..	..	..	NW	..	..	NW	..	..	0	0	0	0	0	0	0
11	NW	..	..	§	..	..	..	..	..	0	0	0	0	0	0	0
12	..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	0
13	..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	0
14	..	..	..	..	..	..	..	..	..	4	1	1	0	0	0	0
15	..	..	..	..	..	..	..	..	..	4	1	1	0	0	0	0
16	..	..	..	..	..	..	..	..	..	4	3	1	0	0	0	0
17	..	..	§	..	..	§	..	..	..	3	2	1	0	0	0	0
18	..	..	..	..	..	..	..	..	..	2	0	0	0	0	0	0
19	..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	0
20	..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	0
21	..	..	..	..	..	..	§	SSW	..	0	0	0	0	0	0	0
22	..	..	..	..	..	..	..	..	..	1	1	0	0	0	0	0
23	..	..	..	..	..	..	..	..	..	1	2	0	0	0	0	0
24	..	..	..	..	..	..	..	..	..	2	1	0	0	0	0	0
25	..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	0
26	..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	0
27	..	..	..	..	..	§	..	..	..	1	0	0	0	0	0	0
28	..	..	§	..	..	..	..	..	..	1	0	0	0	0	0	0
29	..	..	..	..	..	..	..	..	..	4	0	1	0	0	0	0
30	..	..	§	..	..	§	..	..	§	3	0	1	0	0	0	0
31	..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	0
Mean cloud amount.										1·5	1·0	0·6	0·3	0·3	0·4	0·1

..No clouds
†Scattered on the horizon.
‡Haze.
§At low angle.

A-Cu, A-S) ; L=Low clouds (Cu, Cu-N, S, N).

FEBRUARY.

Cloud Forms (coming from)									Cloud Amount (All Forms).							Day.
8½h.			12½h.			16½h.			4h.	8h.	10h.	12½h.	14h.	16h.	22h.	
H.	M.	L.	H.	M.	L.	H.	M.	L.								
..	SSW	..	..	SW	..	†	..	..	1	1	6	2	3	2	0	1
..	§	..	..	..	SW	..	..	SW	2	1	3	7	7	3	5	2
..	..	WSW	..	..	SSW	..	..	SW	10	10	10	9	9	9	7	3
..	..	..	..	..	..	..	..	..	1	0	0	0	0	0	0	4
..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	0	5
..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	0	6
..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	0	7
..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	0	8
..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	0	9
..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	0	10
..	§	..	..	SSE	..	..	..	§	4	0	3	4	0	0	0	11
..	S	..	..	..	..	..	..	..	1	1	6	0	0	0	0	12
..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	0	13
..	..	..	..	..	..	..	..	..	2	0	0	0	0	0	0	14
..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	0	15
..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	0	16
..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	0	17
..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	0	18
..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	0	19
..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	0	20
..	..	NW	..	..	..	..	..	..	4	3	2	0	0	0	0	21
..	..	..	..	..	..	..	..	..	7	0	0	0	0	0	0	22
..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	0	23
..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	0	24
..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	0	25
..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	0	26
..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	0	27
..	..	..	..	SW	..	..	..	†	1	0	0	1	1	1	4	28
..	..	..	..	..	..	..	..	..	2	0	0	2	1	0	0	29
									1·2	0·7	0·9	0·8	0·7	0·5	0·	Mean cloud amount.

APRIL.

..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	0	1
..	..	§	..	..	§	..	..	ESE	1	0	1	1	1	2	7	2
..	..	SE	..	SE	..	SE	..	§	2	3	9	4	1	2	10	3
..	S	NW	..	..	..	SE	SW	§	9	7	9	3	1	2	1	4
S	NW	†	..	..	..	..	..	SW	0	6	1	0	0	0	0	5
..	..	S W	..	..	..	..	..	†	1	3	3	1	0	2	6	6
..	..	S W	..	..	§	..	..	..	4	6	3	1	1	2	2	7
..	..	NNW	..	..	..	..	..	..	5	2	4	1	0	0	2	8
..	..	§	..	..	..	..	..	WSW	2	1	1	0	0	0	0	9
..	..	§	..	..	..	..	..	..	1	0	0	0	0	0	0	10
..	..	..	..	..	..	..	..	..	0	0	1	0	0	0	0	11
..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	0	12
..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	1	13
..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	1	14
..	..	NW	..	..	..	..	..	..	2	4	3	1	0	0	1	15
..	..	..	..	..	§	..	..	..	4	3	3	1	1	2	1	16
‡	..	NW	..	..	NW	..	..	NW	4	3	3	1	1	2	1	17
..	..	NNW	..	..	..	..	..	..	4	6	1	0	0	0	0	18
..	..	N E	..	..	..	..	..	..	2	1	1	1	0	0	0	19
..	..	§	..	..	..	..	..	..	2	1	1	0	0	0	0	20
..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	0	21
..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	1	22
..	ENE	NNW	..	..	..	..	..	..	3	2	4	1	0	0	0	23
..	..	W	..	..	..	..	..	..	4	4	2	2	0	0	3	24
..	..	NW	..	..	..	..	..	..	6	4	4	3	0	0	0	25
..	..	..	..	..	..	..	..	..	3	0	0	0	0	0	0	26
..	..	NNE	..	..	W	..	..	§	4	6	5	3	3	0	6	27
..	NNE	N	..	..	§	..	..	..	6	8	4	3	2	1	5	28
..	..	S	..	..	W	..	..	WSW	6	4	7	3	5	5	4	29
															0	30
									2·5	2·7	1·7	0·6	0·6	0·7	1·8	Mean cloud amount.

.. No cloud.
† Scattered on the horizon.
‡ Haze.
§ At low angle.

Notation :—H=High clouds (Ci, Ci-S.) ; M=Medium clouds (Ci-Cu,

MAY.

Day.	Cloud Forms (coming from)									Cloud Amount (All Forms).						
	6½h.			12½h.			16½h.			6h.	8h.	10h.	12½h.	14h.	16h.	22h.
	H.	M.	L.	H.	M.	L.	H.	M.	L.							
1	..	..	§	..	..	..	..	..	..	5	3	0	0	1	0	1
2	..	..	S	..	..	§	..	SSW	§	4	5	2	1	1	2	0
3	..	..	N	..	..	§	..	..	..	2	4	2	0	0	0	0
4	..	..	..	..	..	..	..	..	..	0	2	0	0	0	0	3
5	..	..	S	..	..	..	..	..	..	2	2	1	0	0	0	3
6	..	..	S	..	..	†	..	..	SW	4	5	2	1	1	2	6
7	..	NNE	S	..	..	§	..	S	SW	7	5	4	1	2	4	2
8	..	N	§	..	N	..	..	§	..	6	4	5	4	2	1	2
9	..	..	SSW	..	..	N	..	..	..	5	5	6	2	1	1	0
10	..	NE	§	..	..	..	..	..	..	6	2	2	0	1	0	3
11	..	..	SSW	..	..	SSW	..	..	SSW	4	4	3	0	2	1	5
12	..	..	SSW	..	..	W	..	..	W	2	3	2	3	5	5	3
13	..	..	S	..	..	SW	..	..	SW	5	6	4	4	3	3	2
14	..	..	WSW	..	..	W	..	..	SW	2	2	6	3	2	4	2
15	..	..	WNW	..	..	W	..	..	WSW	2	2	1	3	4	2	3
16	..	..	W	..	..	W	..	..	W	1	1	2	3	3	2	2
17	..	§	W	..	..	§	..	..	W	2	3	1	2	3	1	2
18	..	..	W	..	..	§	..	..	WNW	1	3	2	2	1	2	2
19	..	..	N	..	..	..	..	..	..	2	2	4	0	0	0	1
20	..	..	NNW	..	..	..	..	..	..	6	2	2	0	0	0	0
21	..	..	NNE	..	..	..	..	..	..	6	2	2	1	0	0	4
22	..	..	N	..	..	N	..	..	WNW	7	10	4	3	2	1	3
23	..	..	SW	..	..	SSW	..	..	SW	7	4	6	5	7	5	3
24	..	..	SW	..	..	SW	..	..	SW	2	4	3	2	4	4	3
25	..	..	WSW	..	..	W	..	..	W	6	3	4	4	2	3	3
26	..	..	§	..	..	§	..	..	§	6	4	1	1	5	1	6
27	..	..	§	..	..	§	..	..	W	2	4	1	1	1	2	2
28	..	..	VNW	..	..	§	..	..	W	2	1	2	1	2	2	4
29	..	..	WSW	..	..	W	..	..	§	1	2	1	2	1	1	2
30	..	..	§	..	..	W	..	..	§	1	2	7	2	1	1	6
31	..	..	§	..	..	§	..	..	§	6	4	1	2	1	2	5
Mean cloud amount.										3·7	3·3	2·7	1·8	1·8	1·7	2·6

JULY.

1	..	..	W	..	..	W	..	..	W	8	7	7	7	5	8	8
2	..	..	WNW	..	..	W	..	..	WSW	6	10	10	10	10	10	10
3	..	..	W	..	..	NW	..	..	W	10	10	10	10	10	10	10
4	..	..	W	..	..	W	..	..	W	10	10	10	10	10	10	10
5	..	..	WSW	..	..	W	..	..	W	10	10	10	10	9	8	7
6	..	..	WSW	..	..	SW	..	..	SW	7	8	4	8	5	6	2
7	..	..	WSW	..	..	WSW	..	..	WSW	5	4	4	4	8	9	4
8	..	..	W	..	..	W	..	SW	§	7	6	6	4	5	3	3
9	..	..	SW	§	..	WSW	..	..	WSW	9	8	7	4	4	4	10
10	..	..	SSW	..	..	SW	..	..	SW	6	9	9	6	6	8	6
11	..	§	S	..	..	SSW	..	..	WSW	7	7	8	10	10	10	10
12	..	..	SW	..	..	NE	..	..	SW	10	10	10	10	10	10	10
13	..	..	W	..	..	W	..	..	W	10	7	8	6	6	7	8
14	..	E	WSW	..	..	W	..	..	W	6	6	7	4	5	7	1
15	..	..	W	..	..	W	..	..	W	6	7	3	2	4	6	2
16	..	..	W	..	..	WSW	..	..	WSW	8	7	6	5	5	8	4
17	..	SW	SW	..	..	SW	..	..	SW	9	6	5	8	9	8	10
18	..	..	SW	..	..	SW	..	..	SW	10	10	10	10	10	10	10
19	..	..	WNW	..	..	WSW	..	..	WSW	10	10	10	10	10	10	7
20	..	..	WSW	..	..	WSW	..	..	WSW	10	10	10	10	10	10	10
21	..	..	WSW	..	..	WSW	..	..	WSW	10	10	10	10	10	10	10
22	..	..	SW	..	..	SW	..	..	SW*	5	5	3	4	10	8	8
23	..	..	SW*	..	..	WSW*	..	..	SW	10	10	7	10	8	7	7
24	..	..	WSW*	..	..	WSW*	..	..	WSW*	10	10	10	10	10	10	10
25	..	..	WSW*	..	..	WSW*	..	..	WSW*	10	10	10	10	10	10	10
26	..	..	WSW*	..	..	WSW*	..	..	WSW*	10	10	10	10	10	10	10
27	..	..	W*	..	..	W*	..	..	W*	10	10	10	10	10	10	10
28	..	..	W	..	..	W	..	..	W	10	10	8	6	9	7	10
29	..	..	W	..	..	WSW	..	..	W	6	7	6	8	8	9	7
30	..	..	WSW*	..	..	W	..	..	WSW	8	10	9	10	7	10	10
31	..	..	SW	..	..	SW*	..	..	SW*	9	9	7	10	6	10	9
Mean cloud amount.										8·5	8·3	8·0	7·9	8·0	8·5	7·2

..No cloud.
*Overcast.
† Scattered on the horizon.
‡ Haze.
§ At low angle.

A-Cu, A-S); L=Low clouds (Cu, Cu-N, S, N.).

JUNE.

Cloud Forms (Coming from)									Cloud Amount (All Forms).							Date.
8½h.			12½h.			16½h.			6h.	8h.	10h.	12½h.	14h.	16h.	22h.	
H.	M.	L.	H.	M.	L.	H.	M.	L.								
..	..	W	..	..	§	..	..	W	2	2	2	1	3	2	5	1
..	..	W	..	..	§	..	..	§	6	6	2	1	1	1	4	2
..	..	SW	§	..	..	..	..	§	6	7	5	2	1	1	7	3
..	..	WSW	..	..	W	..	..	W	7	5	5	2	4	6	9	4
..	..	WSW	..	..	W	..	..	WNW	8	6	10	7	6	8	8	5
..	..	WNW	..	..	WSW	..	..	W	5	8	8	3	6	6	7	6
..	..	NW	..	..	§	..	..	WNW	7	6	3	2	1	6	3	7
..	..	NW	..	..	WNW	..	..	W	5	6	7	5	6	4	2	8
..	..	W	..	..	W	..	..	WSW	7	7	6	4	2	7	3	9
..	..	S	..	..	WSW	E	..	..	10	10	10	10	7	4	5	10
..	..	E	..	..	*	..	..	W	10	8	8	10	10	10	10	11
..	..	WNW	..	..	NW	..	..	NNW	10	10	10	10	10	10	10	12
..	..	WNW	..	..	NW	..	..	N	10	10	10	10	10	10	10	13
..	WNW	†	..	NW	WNW	..	..	W	8	10	10	8	10	8	3	14
..	..	W	..	..	WSW	..	..	WSW	2	5	5	3	4	5	3	15
..	..	WSW	..	..	WSW	..	..	W	6	8	5	10	6	8	2	16
..	W	SW	..	W	W	..	..	W	6	6	10	9	4	5	2	17
..	NE	W	..	..	W	..	NE	W	6	6	8	8	8	6	2	18
..	..	§	..	§	WSW	..	NE	§	5	4	6	5	8	6	3	19
..	..	NE	..	..	SSW	..	..	SSW	10	9	10	10	10	10	10	20
..	W	.	..	..	SW	..	..	SW	6	4	7	3	6	6	10	21
..	..	S	..	..	S	..	..	SSW	10	10	5	7	8	8	10	22
..	..	W	§	..	SE	..	..	SSW	10	7	4	8	10	8	7	23
..	..	SSW	..	..	SW	..	..	SW	8	5	4	6	9	9	5	24
..	W	SW	..	..	SW	..	..	SW	9	9	10	9	10	10	10	25
..	WSW	S	..	..	W	..	..	WNW	9	7	7	4	5	8	6	26
..	..	W	..	..	WNW	..	..	WNW	8	6	9	10	6	8	10	27
..	..	NNW	..	..	NNW	..	..	NNW	10	10	10	9	7	10	10	28
..	..	WNW	..	..	NW	..	..	NNW	10	10	10	10	10	10	10	29
..	..	SW	..	..	NNW	..	..	W	10	10	10	10	10	10	10	30
									7·5	7·2	7·2	6·5	6·5	7·0	6·5	Mean cloud amount.

AUGUST.

..	..	WSW	..	..	WSW	..	..	WSW	10	9	10	10	7	10	10	1
..	..	WSW	..	..	WSW*	..	..	W	10	8	10	10	10	8	10	2
..	..	W	..	..	WSW*	..	..	W	10	8	8	10	8	10	8	3
..	..	W	..	..	WSW	..	SW	W	6	9	7	6	8	8	6	4
..	..	W	..	..	W	..	..	W	8	5	4	6	8	8	7	5
..	..	W	..	..	WSW	..	..	SW	5	5	4	5	4	3	5	6
..	..	SW	..	..	SW	SE	W	SW	5	5	4	5	5	5	4	7
..	..	SW*	..	W	SW	..	..	SW	10	10	7	6	8	8	10	8
..	SW	WSW	..	..	WSW	..	..	W	8	10	9	8	8	9	8	9
..	..	WSW	..	SW	W	..	..	W	10	10	10	9	8	7	5	10
..	..	SW*	..	SW	W	..	..	W	8	10	10	5	4	3	2	11
..	..	W*	..	..	W	..	..	WSW*	10	10	7	8	5	10	3	12
..	..	W	..	..	SW	..	..	WSW	10	7	9	3	8	7	4	13
..	..	WSW	..	SW	WSW	..	SW	WSW	8	8	10	9	10	7	10	14
..	SW	..	..	..	WSW	..	..	WSW	7	6	4	8	5	6	8	15
..	..	WNW	..	..	NW	..	..	WNW	10	10	9	9	10	9	10	16
..	..	W*	..	..	W	..	SW	W	10	10	8	9	9	10	4	17
..	..	W	..	..	W	..	..	W*	8	7	8	7	10	10	9	18
..	SW	WSW	..	..	SW	..	..	W	6	7	4	4	5	2	1	19
..	..	W	..	..	..	..	..	W	5	8	5	10	8	10	6	20
..	..	W	..	..	..	..	..	W	10	10	8	5	7	6	7	21
..	..	W	..	..	WSW*	..	..	W	8	9	9	10	10	8	8	22
..	W	SW	..	W	WSW	..	..	WSW	8	6	6	7	7	6	6	23
..	..	W	..	W	W	..	..	W	10	8	10	8	9	10	9	24
..	..	W	..	..	W	..	..	W	10	10	10	10	10	10	9	25
..	..	W	..	..	WNW	..	..	WNW	10	10	10	10	10	10	10	26
..	..	WSW	..	..	WSW	..	..	WSW	10	10	10	10	10	10	10	27
..	..	W	..	..	W	..	..	W	10	10	10	10	10	10	10	28
..	..	W	..	..	W	..	..	WSW	10	10	10	10	10	10	10	29
..	..	WSW	..	..	WSW	..	..	SW	10	10	10	10	9	9	10	30
..	..	SW	..	..	SW	..	..	SW	10	9	3	6	10	10	10	31
									8·8	8·5	7·7	7·8	7·9	8·0	7·2	Mean cloud amount.

.. No cloud.
* Overcast.
† Scattered on the horizon.
‡ Rain.
§ At low angle.

Notation :—H=High clouds (Ci, Ci-S.); M=Medium clouds.

SEPTEMBER.

Day.	Cloud Forms (Coming from)									Cloud Amount (All Forms).					
	8½h.			12½h.			16½h.			6h.	8h.	10h.	12½h.	14h.	16h.	22h.
	H.	M.	L.	H.	M.	L.	H.	M.	L.							
1	..	..	WSW	..	..	WSW	..	..	WSW	10	9	10	3	5	10	5
2	..	..	S	..	..	SW	..	..	SW	4	5	7	3	4	3	3
3	..	..	W	..	..	WSW	..	..	WSW	7	5	3	4	4	4	2
4	..	..	WSW	..	..	WSW	..	..	SW	5	4	4	6	5	4	2
5	..	..	W	..	..	W	..	E	W	10	5	8	5	5	4	1
6	..	..	SW	..	..	W	..	..	W	6	10	8	4	6	4	1
7	..	NW	WSW	..	..	W	..	..	SW	6	6	5	4	6	2	2
8	..	..	SW	..	..	SW	..	..	SW	6	6	4	6	7	8	5
9	..	..	WSW	..	..	NW	..	..	NW	5	7	4	3	2	4	10
10	..	..	SW	..	..	SW	..	..	WSW	6	9	7	6	8	9	10
11	..	W	..	..	..	W	..	..	WNW	7	7	6	6	8	6	5
12	..	..	W	..	..	WSW	..	..	WSW	7	10	10	10	10	10	4
13	..	..	WSW	..	..	W	..	..	W	8	10	10	7	7	8	2
14	..	NW	NW	..	ESE	WNW	..	..	NW	10	10	8	7	4	4	4
15	..	..	NNE	..	..	NW	..	..	NW	10	10	8	10	9	10	10
16	..	..	NE	..	..	ENE	..	..	NW	10	10	10	10	10	10	10
17	..	..	W	..	..	WSW	..	..	WSW	10	10	10	10	10	10	10
18	..	..	WSW	..	..	WNW	..	..	NW	10	10	10	10	10	10	10
19	..	..	WNW	..	..	WNW	..	..	NW	10	10	10	10	8	7	4
20	..	..	W-W	..	..	WSW	..	..	WSW	10	10	10	10	10	10	10
21	..	..	WSW	..	..	WSW	..	..	WSW	10	10	10	10	10	10	8
22	..	..	SW	..	..	SW	..	..	SW	10	9	8	10	4	5	4
23	..	..	WSW	..	..	WSW	..	..	WSW	3	8	10	10	9	10	3
24	..	..	SW	..	..	SW	..	..	SW	4	1	4	4	5	4	6
25	E	..	SW	..	..	SW	..	..	SW	5	6	6	10	10	8	8
26	..	..	WNW	..	..	W	..	..	W	7	5	5	5	3	4	5
27	..	..	WSW	..	..	NE	..	..	NW	3	4	6	4	5	5	4
28	E	..	NW	E	..	NW	W	..	..	7	3	7	7	4	3	9
29	..	..	NW	..	..	NW	..	..	WNW	10	10	10	10	10	10	10
30	..	..	W	..	..	W	..	..	WSW	10	10	10	10	7	5	10
Mean cloud amount.										7·2	7·6	7·6	7·1	6·8	6·8	5·9

NOVEMBER.

1	..	..	..	..	..	..	..	..	..	0	0	0	0	1	0	0
2	..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	0
3	..	..	..	W	..	..	WNW	..	..	0	0	0	1	1	1	0
4	WSW	..	..	WSW	..	..	WSW	..	..	1	3	3	1	4	0	0
5	..	..	..	..	..	..	..	..	..	0	0	2	1	0	0	0
6	N	..	..	SSW	..	..	..	..	..	0	1	0	1	0	0	0
7	..	..	..	..	..	..	..	..	..	0	0	1	0	0	1	0
8	NNW	..	..	NW	..	..	NNW	..	..	0	1	2	1	2	3	0
9	NW	..	..	W	..	..	W	..	..	1	2	1	2	1	1	0
10	WSW	..	..	WSW	..	..	SW	..	..	2	5	2	2	3	4	0
11	WSW	..	..	SW	..	..	SW	..	..	2	2	2	1	3	4	1
12	..	..	..	..	..	..	..	..	..	1	0	0	0	1	0	0
13	..	SE	..	..	S	..	..	..	SSW	1	4	6	7	8	8	5
14	..	..	S	..	..	SW	..	..	SSW	8	6	7	8	8	10	10
15	..	SSW	..	..	SSW	SW	SW	SSW	..	8	3	5	4	8	2	1
16	..	SSW	..	..	S	..	..	SW	..	3	8	5	3	3	1	0
17	..	..	..	..	..	..	..	..	..	0	0	0	0	1	0	4
18	..	..	..	..	..	..	..	..	..	0	1	0	0	0	0	0
19	..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	0
20	..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	0
21	..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	0
22	..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	0
23	..	..	..	..	..	..	..	..	..	0	0	0	0	1	0	1
24	..	W	..	SW	..	..	WSW	..	..	4	6	5	2	3	2	3
25	..	..	..	..	..	..	..	..	..	0	0	0	0	1	0	0
26	..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	0
27	..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	0
28	..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	2
29	..	..	..	..	..	SW	..	..	SW	1	0	1	2	1	1	1
30	..	..	S	..	..	NW	..	..	..	5	2	6	4	2	1	0
Mean cloud amount.										1·4	1·4	1·6	1·3	1·7	1·5	0·9

..No cloud.
*Overcast.
†Scattered on the horizon.
‡Haze.
§At low angle.

Ci-Cu, A-Cu, A-S); L=Low clouds (Cu, Cu-N, S, N).

OCTOBER.

Cloud Forms (coming from)									Cloud Amount (All Forms).							Date.
8½h.			12½h.			16½h.										
H.	M.	L.	H.	M.	L.	H.	M.	L.	6h.	8h.	10h.	12½h.	14h.	16h.	22h.	
NE	..	NNW	..	..	W	..	NE	..	10	9	5	5	4	3	8	1
..	..	N	N	..	..	..	..	..	7	10	6	6	9	9	9	2
..	..	SW	ENE	WNW	..	..	NW	SW	8	10	6	7	8	3	1	3
..	..	S	..	..	SW	E	..	..	10	7	7	10	9	6	2	4
..	..	SW	..	..	SW	..	..	SW	4	3	3	2	2	3	2	5
..	SW	SE	..	..	NE	..	..	ENE	6	5	3	2	2	1	2	6
..	NE	SE	..	..	SW	..	NNE	NW	9	7	5	4	3	5	2	7
..	..	NNW	..	..	N	..	..	NW	3	1	4	1	1	1	2	8
..	..	..	..	..	..	..	..	..	1	1	0	0	1	0	0	9
..	..	..	..	..	..	..	..	..	1	0	0	0	0	0	0	10
..	..	NW	..	..	..	..	..	..	4	3	1	1	0	0	0	11
..	..	..	..	..	..	..	..	..	1	1	1	0	0	0	0	12
..	..	N	..	..	..	..	..	..	4	2	1	0	0	0	0	13
..	..	..	..	..	..	..	..	..	1	0	0	0	1	0	0	14
..	..	N	..	..	..	..	..	..	1	1	0	0	0	0	1	15
..	..	..	..	..	..	..	..	..	1	0	0	0	0	0	0	16
..	NNE	..	..	..	E	..	NE	..	4	5	3	3	2	0	0	17
..	NE	..	..	SW	..	..	..	SW	3	1	3	3	2	2	2	18
..	..	ESE	..	S	..	..	..	SE	9	7	7	8	5	4	4	19
..	ENE	..	..	S	..	..	S	..	5	7	7	6	5	5	4	20
..	NE	NW	N	..	..	N	..	..	5	6	6	6	5	2	0	21
E	..	..	NNE	..	..	ENE	..	..	4	6	6	6	4	5	0	22
..	..	ESE	..	..	SSE	..	..	SE	3	9	5	8	7	6	8	23
SSW	..	..	..	..	SW	SE	..	W	7	5	6	8	7	6	8	24
..	..	ESE	..	..	ESE	..	..	WSW	9	7	8	7	8	3	10	25
..	SSE	S	..	..	SE	..	SE	..	10	10	9	9	8	4	2	26
..	..	N	..	NW	..	..	..	..	5	2	4	1	0	0	0	27
..	..	..	..	..	..	..	..	..	0	0	1	0	0	0	0	28
..	..	..	..	..	..	..	..	..	1	0	0	0	0	0	0	29
..	..	..	..	..	..	..	..	..	1	0	0	0	0	0	0	30
..	..	..	..	..	..	..	..	..	4	0	0	0	0	0	0	31
									4·7	4·0	3·5	3·2	3·3	2·4	2·8	Mean cloud amount.

DECEMBER.

..	..	..	..	SW	..	..	S	..	1	1	2	4	3	2	1	1
..	..	..	W	..	..	..	SW	..	1	1	2	2	3	3	5	2
..	..	..	..	..	..	..	..	..	3	1	1	0	1	1	0	3
..	SW	..	..	S	..	..	SSE	..	2	1	0	1	1	1	1	4
..	WSW	..	..	SW	..	..	..	SSW	1	1	5	1	4	3	2	5
..	..	..	..	..	SW	..	..	..	1	0	1	0	1	1	3	6
..	..	..	..	..	SW	..	..	SW	1	1	1	0	1	1	0	7
..	..	..	..	..	NE	..	..	..	1	1	1	1	1	1	2	8
..	..	SSE	..	NW	..	..	SE	..	1	1	0	2	2	2	0	9
..	SSW	..	..	..	SW	..	SE	..	2	2	0	4	1	3	2	10
SSW	..	..	5	..	..	WSW	..	..	5	2	4	5	3	4	2	11
NW	..	..	8	..	..	NW	..	..	1	1	1	2	2	2	0	12
..	..	..	..	..	..	..	..	..	0	0	1	0	1	0	0	13
..	..	..	NNW	..	..	..	..	..	1	1	2	2	1	1	0	14
..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	0	15
..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	0	16
..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	0	17
..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	0	18
..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	0	19
..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	0	20
..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	0	21
..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	0	22
..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	0	23
SSW	..	..	..	..	..	..	..	..	1	1	1	1	0	0	0	24
W	..	..	SW	..	..	SW	..	..	1	1	1	1	2	1	1	25
SW	..	..	SW	..	..	..	..	..	1	1	1	2	1	0	0	26
..	..	..	SW	..	..	..	..	..	0	1	1	1	0	0	0	27
..	..	..	..	..	..	..	..	..	1	1	0	0	0	0	0	28
..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	0	29
..	..	..	..	..	..	SW	..	..	1	0	0	0	3	1	0	30
..	..	..	..	..	..	NW	..	..	1	0	0	0	1	1	0	31
									1·1	0·8	0·8	0·9	1·1	0·9	0·6	Mean cloud amount

No cloud.
"Overcast"
†Scattered on the horizon.
‡Haze.
§At low angle.

Month.	Hours.													Bright Sunshine.	
	6—7	7—8	8—9	9—10	10—11	11—12	12—13	13—14	14—15	15—16	16—17	17—18	18—19	Average per day.	Greatest number of hours in a day.
	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hrs.	hrs.
January	0·03	0·87	0·99	0·99	0·99	1·00	1·00	0·98	0·98	0·94	0·85	0·36	..	10·0	10·6
February	·10	·89	·96	·97	·97	0·97	0·97	·96	·94	·97	·98	·51	..	10·2	11·6
March	·07	·76	·98	1·00	1·00	1·00	1·00	1·00	1·00	1·00	·95	·26	..	10·0	10·8
April	·25	·86	·91	0·97	0·95	0·93	0·98	1·00	0·97	0·99	·95	·37	..	10·3	11·3
May	·60	·93	·98	·98	1·00	1·00	1·00	1·00	1·00	1·00	·99	·80	·01	11·3	11·7
June	·14	·47	·63	·52	0·54	0·55	0·57	0·62	0·62	0·63	·47	·20	·03	5·9	11·8
July	·05	·22	·36	·37	·40	·43	·38	·38	·39	·28	·21	·07	..	3·5	10·5
August	·01	·27	·33	·42	·47	·49	·47	·48	·47	·39	·34	·07	..	4·2	10·0
September	·01	·23	·38	·40	·43	·47	·54	·57	·53	·46	·47	·09	..	4·6	9·9
October	·23	·66	·77	·83	·87	·77	·71	·79	·88	·92	·82	·15	..	8·5	10·9
November	·33	·86	·91	·91	·91	·94	·96	·95	·94	·93	·91	·14	..	9·7	11·0
December	·23	·94	·99	·99	1·00	·98	1·00	1·00	1·00	·99	·99	·09	..	10·2	10·6
Mean	0·18	0·66	0·76	0·78	0·79	0·80	0·80	0·73	0·81	0·79	0·74	0·26	0·00	8·2	..

* From Campbell-Stokes Sunshine recorder.

MAGNETIC TABLES.

(ALIBAG OBSERVATORY).

Diurnal variation of magnetic elements.

The following tables give the diurnal variation of declination (D), horizontal component of the force (H), the easterly component (Y), the vertical component (Z), the inclination (I) and the total force (F) for each month based on the hourly tabulations for the 5 international quiet days. Owing to very small value of D the variation tables of H and the northerly component of the force (X) are practically the same. No separate table for $\triangle$ X has consequently been given. The days are reckoned from 4 h. 51 m.' to 3 h. 51 m. of the local mean time corresponding to the Greenwich civil day 0 h. to 23 h.

The variations in X, Y, I and F were computed from the variations in D, H and Z by means of the formulæ :

$$\triangle X = 1{\cdot}000 \triangle H + 0{\cdot}010 \triangle D.$$
$$\triangle Y = -0{\cdot}001 \triangle H + 10{\cdot}810 \triangle D.$$
$$\triangle I = 0{\cdot}075 \triangle Z - 0{\cdot}036 \triangle H.$$
$$\triangle F = 0{\cdot}903 \triangle H + 0{\cdot}430 \triangle Z.$$

A *plus* sign indicates an hourly value greater than the mean for the day.

Mean results are also given for groups of four months, as indicated by the Roman numerals at the head of the columns :—I January, February, November, December ; II March, April, September, October ; III May, June, July, August.

All diurnal inequalities have been corrected for the aperiodic change by the formula $\frac{N(12-n)}{24}$ where 'N' denotes the excess at the second midnight of the representative day as compared to the first midnight, and 'n' denotes any hour of the day reckoned from 0 (first midnight) to 24.

The actual non-cyclic corrections applied, namely, $a_{24}-a_0$, in the different months of the year have been given under the respective columns of the tables for $\triangle$D, $\triangle$H and $\triangle$Z.

The "allowance for the use of the Means", which is given by $u_p = m_p + \frac{1}{3}\left(m_p - \frac{m_{p+1}+m_{p-1}}{2}\right)$, where u_p is the true ordinate and m_{p-1}, m_p, m_{p+1} the successive mean ordinates, is very small and less than 1γ in the case of H and V and 0·1 minute of arc in the case of D. Although small, the corrections have been used in determining the last significant figure in the following variation tables.

DIURNAL VARIATION OF D, 1928.

[INTERNATIONAL QUIET DAYS, GREENWICH MEAN TIME.]

Hour.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Group means.			Year.
	I	I	II	II	III	III	III	III	II	II	I	I	I	II	III	
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
0	−0·1	−0·2	−0·2	−0·1	+0·3	+0·5	+0·4	+0·3	+0·4	0·0	−0·4	−0·2	−0·2	0·0	+0·4	+0·1
1	−0·1	−0·4	−0·1	+0·4	+1·2	+1·1	+1·4	+1·3	+1·0	+0·2	−0·3	−0·3	−0·3	+0·4	+1·2	+0·5
2	0·0	−0·7	+0·4	+1·8	+2·6	+2·0	+2·4	+2·4	+2·5	+1·2	−0·3	−0·2	−0·3	+1·5	+2·3	+1·2
3	+0·8	−0·4	+1·5	+2·5	+2·9	+2·1	+2·7	+2·5	+3·1	+1·3	−0·2	+0·5	+0·2	+2·1	+2·5	+1·6
4	+1·8	−0·1	+2·9	+2·4	+2·1	+1·9	+1·9	+1·7	+2·2	+0·9	−0·1	+1·2	+0·7	+1·9	+1·9	+1·5
5	+0·8	+0·3	+1·5	+1·0	−0·1	+0·8	+0·7	+0·1	+0·1	−0·3	−0·5	+0·7	+0·3	+0·6	+0·4	+0·4
6	−0·5	+0·4	+0·5	−0·3	−1·6	−0·2	−0·3	−1·2	−1·3	−1·1	−0·6	+0·1	−0·1	−0·5	−0·8	−0·5
7	−1·9	+0·1	−0·5	−1·4	−2·5	−1·5	−1·3	−2·1	−2·6	−1·9	−0·5	−0·8	−0·6	−1·5	−1·9	−1·3
8	−1·3	+0·1	−1·2	−1·8	−2·8	−2·1	−1·5	−2·5	−2·9	−1·8	−0·1	−0·6	−0·5	−1·7	−2·2	−1·6
9	−0·8	+0·3	−1·2	−1·7	−2·1	−1·8	−1·4	−2·1	−2·1	−0·3	+0·4	−0·6	−0·2	−1·3	−1·9	−1·1
10	−0·4	+0·3	−0·4	−1·0	−1·1	−1·6	−1·2	−1·2	−0·9	+0·3	+0·4	−0·5	−0·1	−0·5	−1·3	−0·6
11	0·0	+0·2	+0·1	−0·3	−0·3	−0·9	−0·6	−0·4	+0·6	+0·8	+0·3	+0·3	+0·1	+0·1	−0·5	−0·1
12	+0·2	+0·1	+0·1	+0·0	+0·1	−0·0	−0·2	+0·6	+0·1	+0·2	+0·2	+0·1	+0·1	+0·1	0·0	0·0
13	0·0	−0·3	−0·3	+0·2	+0·2	−0·2	0·0	+0·7	−0·2	+0·4	+0·1	−0·1	−0·1	+0·2	+0·2	0·0
14	0·0	−0·3	−0·3	+0·3	+0·1	0·0	−0·4	+0·1	−0·2	+0·7	+0·1	+0·2	0·0	−0·3	−0·0	−0·1
15	+0·1	−0·1	−0·3	+0·5	−0·3	−0·3	−0·7	−0·1	−0·2	+0·1	+0·2	+0·4	+0·1	0·3	−0·3	−0·2
16	+0·1	0·0	−0·3	+0·4	0·0	−0·4	−0·7	−0·5	−0·2	−0·2	+0·1	+0·3	+0·1	−0·1	−0·3	−0·2
17	+0·1	0·0	−0·2	+0·4	+0·1	−0·3	−0·5	−0·1	−0·1	0·0	+0·1	+0·1	+0·1	−0·2	−0·2	−0·1
18	+0·1	+0·1	−0·2	−0·3	0·0	0·0	−0·5	−0·1	0·0	+0·1	+0·1	+0·2	+0·1	−0·1	−0·1	−0·1
19	+0·1	+0·1	−0·1	+0·1	+0·1	+0·2	−0·3	−0·1	+0·1	+0·3	+0·1	+0·2	+0·1	0·0	+0·1	0·0
20	+0·1	+0·2	−0·2	0·0	+0·2	+0·3	−0·2	0·0	+0·3	+0·3	+0·1	+0·1	+0·2	+0·1	+0·1	+0·1
21	+0·1	+0·1	−0·2	0·0	+0·4	+0·3	0·0	+0·1	+0·3	+0·1	+0·2	0·0	+0·1	+0·2	+0·2	+0·1
22	+0·1	+0·1	−0·2	−0·1	+0·3	+0·3	+0·1	+0·2	+0·3	−0·1	+0·3	0·0	+0·1	0·0	+0·2	+0·1
23	0·0	0·0	−0·2	−0·1	+0·3	+0·4	+0·2	+0·3	0·0	+0·2	−0·1	0·0	0·0	0·0	−0·3	−0·1
Non-cyclic change (24h—0h)	−0·13	−0·09	−0·04	−0·10	−0·17	+0·05	+0·07	+0·09	−0·21	+0·14	−0·33	−0·16				

DIURNAL VARIATION OF H, 1928.

[INTERNATIONAL QUIET DAYS, GREENWICH MEAN TIME.]

	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
0	−8	−9	−13	−18	−14	−11	−12	−13	−9	−12	−19	−7	−8	−13	−13	−11
1	−7	−8	−11	−11	−12	−10	−11	−10	−10	−12	−9	−5	−5	−11	−10	−10
2	−4	−2	−9	−11	−5	−6	−9	−10	−14	−9	−2	+2	−1	−11	−7	−7
3	−4	+5	−11	+8	+4	+1	−2	−12	+4	+11	+23	+6	+11	−2	+1	+1
4	−1	+14	+13	+18	+21	+8	+10	+26	+3	+22	+31	+10	+11	+14	+12	+13
5	+7	+26	+27	+35	+35	+21	+24	+38	+19	+36	+39	+18	+20	+26	+26	+26
6	+16	+32	+36	+43	+41	+29	+30	+35	+26	+44	+39	+28	+27	+36	+34	+32
7	+21	+38	+38	+43	+40	+32	+31	+37	+30	+45	+36	+27	+27	+37	+35	+33
8	+17	+28	+32	+36	+32	+26	+30	+35	+30	+25	+27	+11	+21	+31	+27	+27
9	+11	+19	+19	+17	+21	+11	+16	+23	+15	+15	+15	+5	+11	+20	+18	+19
10	+6	+10	+8	+17	+9	+11	+13	+17	+12	+1	+5	+4	+6	+9	+13	+9
11	+3	+2	+1	+8	+2	+2	+1	+5	+8	−6	−2	+1	+1	+3	+2	+1
12	0	−4	−5	0	−4	−4	−5	−6	−1	−8	−8	−3	−4	−3	−5	−4
13	−3	−6	−7	−7	−10	−9	−10	−11	−6	−11	−11	−6	−8	−8	−8	−9
14	−3	−10	−12	−15	−11	−11	−11	−12	−4	−9	−12	−8	−11	−11	−13	−12
15	−5	−12	−13	−14	−17	−13	−12	−13	−7	−11	−15	−11	−13	−13	−14	−12
16	−6	−13	−15	−16	−19	−13	−12	−15	−11	−15	−18	−13	−14	−14	−15	−14
17	−7	−14	−17	−17	−19	−14	−11	−16	−12	−14	−18	−12	−14	−14	−14	−14
18	−6	−13	−14	−16	−17	−9	−10	−14	−13	−13	−14	−8	−11	−15	−13	−13
19	−5	−14	−14	−16	−16	−10	−12	−14	−12	−11	−12	−8	−10	−14	−12	−12
20	−6	−13	−14	−18	−16	−12	−11	−13	−11	−12	−14	−7	−10	−14	−13	−12
21	−7	−13	−15	−20	−16	−10	−12	−13	−10	−12	−15	−8	−10	−14	−12	−12
22	−7	−12	−15	−20	−15	−9	−12	−13	−9	−13	−14	−6	−10	−14	−13	−12
23	−7	−13	−14	−20	−13	−11	−13	−14	−7	−12	−13	−6	−10	−13	−13	−12
Non-cyclic change (24h—0h).	+3·4	+3·5	+2·8	+3·0	+6·8	+3·3	+0·8	+3·0	+13·2	+7·5	+8·2	+6·5				

DIURNAL VARIATION OF Y, 1928.

[INTERNATIONAL QUIET DAYS, GREENWICH MEAN TIME.]

	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
0	−1	−2	−3	−1	+4	+6	+4	+13	+9	+2	−4	−2	−2	+4	+4	+1
1	−1	−4	−1	+6	+13	+27	+12	+27	+27	+4	−7	+3	+2	+16	+13	+5
2	−3	−7	−1	+16	+27	+41	+21	+36	+35	+14	−2	+13	+2	+28	+25	+13
3	+2	−9	+1	+19	+26	+22	+28	+20	+18	+23	+12	+6	+4	+16	+17	+12
4	+9	−1	+3	+16	+11	−2	+9	+8	+7	+14	+19	+7	+7	+8	+8	+7
5	+4	−4	+4	+8	+2	−16	+4	−4	−13	+6	+12	+4	+2	−6	−1	−1
6	−4	−2	+2	−2	−9	−26	−16	−14	−17	−5	+2	−2	−2	−18	−13	−14
7	−14	+2	+2	−13	−19	−31	−22	−33	−27	−13	−7	−9	−7	−24	−20	−16
8	−14	+2	+2	−13	−18	−33	−20	−15	−23	−22	−10	−7	−7	−20	−13	−12
9	−6	+3	+1	−5	−11	−12	−16	−13	−7	−13	−7	−4	−4	−13	−7	−7
10	−1	+2	+1	+1	+3	+1	−6	−2	−7	−10	−3	+1	+1	−6	−2	−3
11	+2	0	+1	+1	+2	+2	+2	0	−4	−3	+1	+3	+2	−1	0	0
12	0	+1	+1	+1	+1	+2	+4	+2	−1	−1	+3	+2	+1	+2	+2	+2
13	−1	+1	+1	+1	+1	+3	+4	+3	+1	+2	+3	+2	+1	+3	+3	+2
14	−1	+1	+1	+1	+1	+3	+4	+3	+2	+3	+3	+2	+1	+3	+3	+2
15	−1	+1	+1	+1	+1	+3	+4	+3	+2	+3	+3	+2	+1	+3	+3	+2
16	−1	+1	+1	+1	+1	+3	+4	+3	+2	+3	+3	+2	+1	+3	+3	+2
17	−1	+1	+1	+1	+1	+3	+4	+3	+2	+3	+3	+2	+1	+3	+3	+2
18	−1	+1	+1	+1	+1	+3	+4	+3	+2	+3	+3	+2	+1	+3	+3	+2
19	−1	+1	+1	+1	+1	+3	+4	+3	+2	+3	+3	+2	+1	+3	+3	+2
20	−1	+1	+1	+1	+1	+3	+4	+3	+2	+3	+3	+2	+1	+3	+3	+2
21	−1	+1	+1	+1	+1	+3	+4	+3	+2	+3	+3	+2	+1	+3	+3	+2
22	−1	+1	+1	+1	+1	+3	+4	+3	+2	+3	+3	+2	+1	+3	+3	+2
23	−1	0	+1	+1	+1	+3	+4	+3	+2	+3	+3	+2	+1	+3	+3	+2

[INTERNATIONAL QUIET DAYS, GREENWICH MEAN TIME.]

Hours.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Group means.			Year.
	I	I	II	II	III	III	III	III	II	II	I	I	I	II	III	
0	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	+2	+4	+3	+7	+3	+8	+8	+7	+11	+9	+1	+1	+2	+7	+8	+6
2	+3	+3	+6	+13	+16	+14	+18	+14	+19	+13	+2	+2	+3	+13	+16	+10
3	+7	+3	+10	+17	+21	+14	+18	+15	+23	+13	0	+3	+4	+16	+17	+12
4	+11	+7	+9	+8	+12	+7	+10	+13	+12	0	+3	+2	0	+8	+7	+8
5	+6	+7	+1	+3	+7	+1	+1	+2	+5	+2	+4	+6	+3	+4	+4	+2
6	−13	+3	−11	−18	−29	−12	−16	−22	−31	−21	−19	−6	−7	−20	−29	−15
7	−19	+1	−18	−21	−29	−20	−24	−22	−37	−24	−7	−12	−9	−25	−24	−19
8	−17	0	−20	−19	−26	−25	−23	−16	−35	−16	0	−12	−7	−23	−23	−17
9	−10	0	−16	−18	−18	−21	−14	−11	−21	−6	+2	−8	−4	−14	−16	−11
10	−4	+1	−6	−6	−7	−13	−7	−4	−6	0	+2	−6	−2	−6	−9	−5
11	−1	−2	0	+1	−1	−7	−3	+4	+5	+3	0	0	−1	+2	−2	0
12	+2	−3	0	+4	+5	−2	+2	+6	+5	−1	0	0	+2	+3	+3	+5
13	+1	−4	−2	+2	+5	+1	+4	+4	0	−3	−1	0	+2	+2	+3	0
14	0	−5	−2	+3	+4	+1	+2	+3	+1	+1	0	+1	+2	+2	+2	+1
15	+2	−3	+1	+4	+4	+1	+1	+2	+3	+1	0	+1	+1	+3	+2	0
16	+2	−2	+1	+4	+4	+1	+1	+2	+3	+1	0	+1	+1	+4	+1	+1
17	+2	−2	+3	+1	+3	+2	+1	+1	+4	+2	0	+3	+1	+3	+1	+2
18	+2	−1	+3	+3	+4	+4	+3	+4	+5	+2	+1	+3	+2	+4	+2	+3
19	+3	0	+4	+5	+5	+6	+4	+3	+7	+3	+2	+4	+3	+4	+3	+4
20	+4	0	+5	+6	+6	+7	+6	+4	+8	+4	+3	+4	+3	+5	+4	+5
21	+4	0	+6	+6	+7	+7	+7	+6	+9	+7	+3	+3	+3	+6	+5	+5
22	+4	+1	+6	+6	+7	+7	+7	+6	+9	+7	+3	+2	+3	+7	+6	+5
23	+4	+2	+6	+5	+6	+7	+7	+6	+9	+7	+3	+2	+3	+7	+6	+5
	+4	+3	+5	+5	+6	+7	+7	+6	+8	+6	+2	+1	+2	+7	+6	+4
	+4	+3	+5	+5	+6	+7	+7	+6	+8	+6	+2	+1	+1	+6	+7	+5
Nonecyclic change (24h.–0h.)	+2·1	+0·1	−0·5	+1·0	−2·2	−1·7	−1·6	−0·7	−1·3	−3·9	−1·2	+3·4				

DIURNAL VARIATION OF I, 1928.
[INTERNATIONAL QUIET DAYS, GREENWICH MEAN TIME.]

0	+0·3	+0·6	+0·3	+1·2	+1·1	+1·0	+1·0	+1·0	+1·1	+1·1	+0·5	+0·2	+0·4	+1·1	+1·0	+0·8
1	+0·4	+0·4	+0·3	+1·6	+1·6	+1·5	+1·7	+1·6	+1·8	+1·5	+0·4	+0·2	+0·3	+1·4	+1·6	+1·1
2	+0·6	+0·5	−1·0	+1·7	+1·8	+1·2	+1·7	+1·5	+2·0	+1·3	+0·3	+0·1	−0·2	+1·6	+1·7	+1·1
3	+0·9	+0·3	+0·7	+0·6	+1·2	+0·5	+0·8	+0·3	+1·3	0·0	−0·4	+0·4	+0·3	+0·7	+0·7	+0·5
4	+0·5	0·0	−0·4	−1·3	−0·4	−0·3	−1·0	−0·5	−1·5	−1·1	+0·1	−0·1	−0·9	−0·7	−0·7	−0·6
5	−1·3	−0·7	−1·8	−2·6	−3·4	−1·7	−2·1	−2·6	−3·0	−2·3	−1·8	−1·0	−1·2	−2·6	−2·5	−2·1
6	−2·0	−1·1	−2·6	−3·0	−3·7	−2·6	−2·9	−2·8	−3·7	−3·4	−1·9	−1·6	−1·7	−3·2	−3·0	−2·6
7	−2·0	−1·2	−2·9	−2·9	−3·5	−3·1	−2·8	−2·5	−3·7	−2·5	−1·3	−1·5	−1·5	−3·0	−3·0	−2·5
8	−1·4	−1·0	−2·3	−2·4	−2·5	−2·5	−2·2	−2·1	−2·7	−1·3	−0·7	−1·1	−1·1	−2·2	−2·3	−1·9
9	−0·7	−0·6	−1·1	−1·4	−1·2	−1·7	−1·3	−1·1	−1·3	−0·4	−0·4	−0·7	−0·6	−1·7	−1·5	−1·0
10	−0·3	−0·3	−0·5	−0·5	−0·4	−0·9	−0·8	−0·5	0·0	+0·2	−0·2	−0·3	−0·3	−0·7	−0·6	−0·4
11	0·0	−0·3	0·0	0·0	+0·3	−0·2	+0·2	+0·2	+0·3	+0·1	0·0	0·0	+0·1	+0·1	+0·1	+0·1
12	+0·1	−0·2	+0·1	+0·2	+0·4	0·0	+0·5	0·0	+0·3	0·0	0·0	−0·1	0·0	0·0	+0·3	+0·1
13	+0·1	−0·1	0·0	+0·2	+0·6	+0·4	+0·4	+0·2	0·0	0·0	+0·3	+0·2	+0·1	+0·1	+0·5	+0·2
14	+0·3	+0·2	+0·4	+0·1	+0·5	+0·6	+0·1	+0·2	+0·4	+0·4	+0·4	+0·5	+0·3	+0·3	+0·3	+0·3
15	+0·4	+0·3	+0·6	+0·4	+0·6	+0·6	+0·3	+0·4	+0·5	+0·5	+0·5	+0·7	+0·5	+0·5	+0·5	+0·5
16	+0·4	+0·4	+0·7	+0·7	+0·9	+0·7	+0·5	+0·6	+0·7	+0·6	+0·6	+0·6	+0·5	+0·7	+0·7	+0·6
17	+0·5	+0·5	+0·8	+0·8	+1·1	+0·7	+0·7	+0·7	+0·9	+0·9	+0·6	+0·6	+0·6	+0·9	+0·8	+0·7
18	+0·5	+0·6	+0·9	+0·9	+1·1	+0·8	+0·8	+0·8	+1·0	+0·9	+0·6	+0·6	+0·6	+0·9	+0·9	+0·8
19	+0·5	+0·5	+0·9	+1·1	+1·1	+0·8	+0·7	+0·8	+1·0	+0·9	+0·7	+0·5	+0·6	+1·0	+0·9	+0·8
20	+0·5	+0·5	+0·9	+1·2	+1·1	+0·9	+0·8	+0·9	+1·0	+0·9	+0·7	+0·4	+0·5	+1·0	+0·9	+0·8
21	+0·5	+0·4	+0·9	+1·1	+1·1	+0·9	+0·9	+0·9	+1·0	+0·9	+0·7	+0·3	+0·6	+1·0	+0·9	+0·8
22	+0·6	+0·3	+0·9	+1·1	+1·0	+0·8	+0·9	+0·9	+0·9	+0·9	+0·6	+0·3	+0·5	+0·9	+0·9	+0·8
23	+0·6	+0·3	+0·9	+1·1	+1·0	+0·9	+1·0	+1·0	+0·9	+0·8	+0·6	+0·2	+0·4	+0·9	+1·0	+0·8

DIURNAL VARIATION OF F, 1928.
[INTERNATIONAL QUIET DAYS, GREENWICH MEAN TIME.]

0	−5	−7	−10	−13	−9	−7	−7	−9	−4	−7	−9	−9	−6	−9	−8	−8
1	−3	−4	−7	−9	−4	−3	−3	−8	−2	−4	−7	−7	−4	−7	−6	−5
2	−1	−1	−4	−3	+1	0	−1	−3	+1	−1	−3	−3	−1	−3	−1	−1
3	+1	+7	+3	+4	+13	+4	+2	−1	+5	+5	+10	+2	+3	+4	+4	+4
4	+2	+16	+13	+15	+16	+7	+8	+5	0	+16	+19	+11	+12	+6	+9	+6
5	+11	+25	+20	+24	+20	+14	+15	+13	+4	+23	+24	+12	+15	+16	+18	+16
6	+17	+29	+25	+26	+24	+18	+17	+22	+12	+29	+29	+8	+19	+23	+23	+21
7	+12	+30	+26	+30	+25	+19	+18	+27	+12	+26	+31	+10	+21	+24	+22	+23
8	+11	+25	+26	+26	+22	+15	+21	+27	+18	+21	+26	+6	+17	+22	+17	+20
9	+8	+17	+15	+21	+15	+11	+17	+26	+18	+11	+14	+2	+11	+16	+17	+15
10	+5	+7	+7	+16	+9	+4	+7	+17	+13	+2	+6	+1	+6	+9	+11	+8
11	+3	0	−1	+9	+4	+1	+2	+7	+7	+5	+1	+1	+3	+4	+3	+3
12	0	−5	−5	+2	+1	−3	+3	−1	+1	−10	−9	−2	−1	−1	−1	−2
13	−2	−6	−7	−1	−2	−7	−3	−9	−3	−9	−11	−7	−4	−4	−4	−5
14	−3	−7	−10	−3	−7	−13	−8	−13	−8	−10	−13	−8	−7	−9	−8	−8
15	−3	−12	−9	−6	−11	−16	−11	−12	−5	−10	−13	−8	−9	−9	−12	−10
16	−5	−14	−10	−14	−16	−10	−13	−13	−8	−13	−15	−10	−11	−11	−11	−11
17	−5	−16	−11	−14	−15	−8	−8	−13	−8	−11	−13	−9	−11	−11	−11	−11
18	−5	−16	−10	−14	−13	−6	−8	−11	−9	−11	−13	−9	−11	−11	−11	−10
19	−3	−14	−10	−14	−11	−6	−9	−11	−7	−10	−13	−8	−10	−10	−9	−9
20	−3	−12	−10	−14	−12	−7	−7	−10	−6	−8	−12	−6	−8	−10	−9	−9
21	−4	−12	−10	−16	−11	−6	−7	−9	−5	−8	−12	−6	−8	−10	−9	−9
22	−5	−11	−11	−16	−11	−5	−9	−10	−5	−9	−12	−6	−9	−9	−9	−9
23	−5	−13	−10	−16	−9	−6	−9	−10	−3	−9	−11	−6	−9	−9	−9	−9

(Averages for periods of sixty minutes centered at the full hours of Greenwich mean time.)

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Date.	Hours. (G. M. T.)														
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	3·1	3·0	3·3	2·8	2·0	3·4	4·7	5·5	5·5	5·0	4·2	2·5	2·0	2·5	2·8
2	3·6	3·3	3·1	2·1	0·5	0·8	2·0	3·5	3·9	3·8	3·4	3·0	2·9	3·1	2·9
3	3·7	3·5	3·2	1·8	0·9	1·7	2·9	4·6	4·7	4·7	4·3	3·7	3·2	3·3	3·1
4	3·7	3·7	3·3	2·5	1·0	0·9	1·5	2·9	5·0	5·8	5·2	4·3	3·1	3·0	2·9
5	3·9	3·9	3·8	3·5	2·1	1·2	1·6	2·2	3·1	4·1	4·1	3·2	2·9	3·0	2·9
6	3·4	3·5	3·9	3·4	2·0	1·6	1·7	2·1	2·2	2·8	2·7	2·9	3·0	3·0	3·0
7	3·7	3·9	3·9	2·8	1·5	1·5	2·6	3·8	4·1	3·9	3·6	3·4	3·2	3·2	3·0
8	3·4	3·2	3·2	1·7	0·3	1·4	2·5	3·6	3·5	3·1	3·0	3·0	3·2	3·3	3·2
9	3·3	3·2	3·3	2·3	1·0	1·0	1·3	3·3	3·7	4·0	4·1	3·8	3·5	3·1	2·8
10	3·3	3·3	3·3	2·1	0·7	1·2	3·1	4·5	4·2	3·9	3·6	3·0	2·8	3·2	3·3
11†	3·1	3·1	3·3	3·0	2·4	4·4	5·2	5·4	5·0	4·5	3·7	2·9	2·6	3·0	3·0
12†	3·1	3·1	3·0	1·8	0·3	0·6	2·5	4·2	5·0	4·7	4·0	3·3	3·0	3·0	3·1
13†	3·1	3·1	3·1	2·5	1·2	2·0	3·4	4·5	4·2	3·4	3·1	2·4	2·3	3·0	3·1
14†	3·3	3·4	3·4	2·3	1·2	1·9	3·0	4·0	4·1	3·3	3·1	3·1	3·0	3·2	3·2
15	3·5	3·6	3·5	3·0	2·0	1·1	1·1	3·1	4·5	4·2	3·7	3·2	3·0	3·2	3·2
16	4·3	4·4	4·2	3·0	1·5	0·8	1·1	2·4	3·3	3·3	3·2	3·0	3·4	3·5	3·2
17	4·1	4·2	4·1	3·2	1·9	1·4	2·1	3·1	4·3	4·3	3·7	2·9	2·9	3·0	3·1
18	3·8	4·1	4·1	3·7	2·7	2·3	2·5	3·5	3·8	3·3	3·4	3·4	3·3	3·3	3·1
19	4·1	4·1	4·3	3·8	2·5	1·3	1·2	1·9	3·0	3·1	3·6	3·4	3·3	3·2	3·0
20	3·6	3·8	3·7	3·4	3·1	2·4	2·3	3·6	4·2	4·3	4·4	4·6	4·1	3·5	3·3
21	4·3	4·5	4·5	3·2	2·1	1·3	1·8	3·0	3·1	3·1	3·4	3·3	3·3	3·2	3·3
22	3·8	4·1	4·2	3·7	2·6	2·3	2·5	4·0	4·5	4·3	4·2	4·0	3·6	3·6	3·2
23	4·0	4·3	4·1	2·8	1·7	1·9	2·6	3·5	4·0	3·4	2·9	3·1	3·6	3·3	3·7
24	3·3	3·5	4·0	3·9	3·3	3·3	4·4	5·6	5·5	4·7	4·1	3·6	3·3	3·7	3·6
25	3·3	3·7	4·3	4·2	3·4	3·0	3·3	3·4	2·7	1·9	2·0	2·8	3·5	4·3	3·7
26	3·9	3·8	3·8	3·6	2·8	2·4	3·2	4·8	4·9	3·8	2·7	2·7	3·6	4·9	3·6
27	3·2	3·5	3·8	3·4	2·6	3·3	3·7	4·0	3·7	2·9	2·2	1·8	2·8	2·6	2·0
28	3·0	3·2	3·4	3·1	2·2	1·7	2·6	4·2	3·8	3·1	2·1	1·5	1·8	2·5	2·9
29	3·5	3·5	3·1	2·4	1·6	2·7	3·9	4·5	3·9	3·2	3·0	2·6	2·1	3·5	3·2
30	3·3	3·2	3·1	2·5	1·5	1·3	2·2	3·9	3·8	3·1	2·9	2·2	2·3	2·9	3·1
31†	3·3	3·2	2·7	2·2	2·0	3·0	4·0	4·1	4·0	4·1	4·0	4·0	4·0	3·9	3·6
Mean . .	3·5	3·6	3·6	2·9	1·8	1·9	2·7	3·4	4·0	3·8	3·5	3·1	3·1	3·3	3·1
Mean† . .	3·2	3·2	3·1	2·4	1·4	2·4	3·6	4·4	4·5	4·0	3·6	3·1	3·0	3·2	3·2

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1	3·5	3·5	3·1	2·1	1·0	0·7	1·9	3·7	4·1	3·7	3·2	2·6	2·5	3·0	3·3
2	3·8	3·5	3·4	2·3	1·2	0·9	1·7	2·8	3·1	4·0	4·1	4·0	3·9	3·9	3·5
3	3·9	4·0	3·9	3·0	1·9	1·1	2·0	3·5	3·5	2·9	2·8	2·9	3·1	3·2	3·0
4	4·2	4·6	4·8	3·9	3·0	2·1	3·0	3·4	3·6	4·0	4·5	4·1	3·6	3·5	3·2
5	3·9	4·6	5·0	4·3	2·9	2·5	3·0	4·0	4·2	4·3	3·4	2·6	2·6	2·8	2·9
6	4·0	4·2	3·9	3·3	3·0	3·3	3·8	4·0	3·9	3·5	3·2	2·8	3·1	3·6	3·7
7	3·7	3·8	3·6	3·2	2·2	1·2	1·5	3·3	3·8	3·8	3·0	2·4	2·8	3·6	3·6
8†	3·4	3·8	4·1	3·8	3·1	2·6	2·6	2·9	2·8	2·1	1·9	2·2	2·7	3·5	3·7
9†	3·1	3·1	3·7	3·9	3·7	3·2	3·6	3·7	3·8	3·9	3·8	3·5	3·2	3·6	3·7
10†	3·7	3·8	4·0	3·1	2·8	2·4	2·1	2·1	2·1	2·0	2·3	3·2	3·9	4·2	4·0
11†	3·6	4·0	4·4	4·2	4·1	3·7	3·1	3·4	3·3	3·4	3·7	3·6	3·7	3·8	3·6
12	4·0	4·1	4·4	3·8	3·5	4·0	3·4	3·6	4·1	3·3	3·2	3·3	3·2	3·3	3·3
13	3·6	3·4	3·4	3·6	3·0	2·3	3·4	3·4	3·2	2·8	3·1	3·3	3·3	3·3	3·4
14	3·1	3·4	3·5	3·7	3·2	3·3	3·6	4·1	4·3	4·3	4·7	4·3	3·8	3·3	3·1
15	3·3	3·4	3·5	3·7	3·4	3·4	3·7	4·2	3·8	3·7	3·7	3·7	3·8	4·0	3·9
16	3·6	3·6	3·8	4·0	3·9	3·6	3·9	4·0	3·7	3·1	2·7	2·7	3·1	3·3	3·3
17	3·3	3·2	3·3	3·2	2·9	3·0	3·3	3·8	4·2	3·7	4·5	4·5	3·7	4·7	4·1
18	3·8	4·2	4·6	3·7	2·7	2·2	2·4	3·7	3·8	3·6	2·8	3·2	3·3	3·7	4·0
19	4·2	4·6	4·9	5·4	5·3	4·8	3·8	3·8	3·7	3·5	3·5	3·3	3·3	3·7	3·7
20	3·6	3·9	4·6	4·3	3·3	1·8	1·0	1·1	2·3	3·6	3·8	3·7	3·9	4·1	4·1
21	3·1	3·5	3·6	2·3	2·3	2·6	2·5	2·4	3·1	3·1	3·1	3·3	3·6	4·3	4·2
22	3·5	4·3	4·5	3·9	2·7	2·5	2·5	2·4	2·3	2·5	2·5	2·6	3·3	3·9	3·9
23	3·3	3·4	3·9	3·3	2·5	2·6	2·7	3·2	3·1	3·9	3·4	2·8	2·8	3·0	3·6
24†	3·9	4·0	3·9	3·5	3·3	3·3	3·7	3·9	4·0	3·8	3·7	3·5	2·9	3·2	3·6
25	3·7	4·0	4·6	4·2	3·5	3·6	3·6	4·1	3·9	3·9	3·4	2·6	2·3	3·1	3·3
26	3·7	3·5	3·7	2·9	2·7	2·7	3·4	4·2	4·3	3·5	3·4	2·9	1·9	2·5	2·9
27	2·4	3·5	3·9	3·4	2·6	2·7	2·9	4·2	4·3	3·0	3·0	2·7	2·7	3·1	3·6
28	3·2	3·1	3·2	2·7	2·0	1·9	2·3	3·3	3·9	4·3	4·2	3·6	3·3	3·4	2·9
29	3·4	3·6	3·2	2·4	1·4	1·9	2·9	4·5	5·0	4·5	3·4	2·7	3·1	3·5	3·6
Mean . .	3·6	3·8	4·0	3·5	2·9	2·7	2·9	3·5	3·7	3·5	3·4	3·2	3·2	3·5	3·5
Mean† . .	3·6	3·7	4·0	3·7	3·4	3·0	3·0	3·2	3·2	3·1	3·1	3·2	3·3	3·6	3·7

† Five international quiet days.

‡ All the figures in this table indicate *westerly* declination except those followed by 'E' which represent *easterly* declination.

DECLINATION (WESTERLY‡), 1928.

(Averages for periods of sixty minutes centered at the full hours of Greenwich mean time.)

JANUARY. 0° PLUS TABULAR QUANTITIES.

Hours. (G. M. T.)								Mean.*	Maximum.		Minimum.		Date.
15	16	17	18	19	20	21	22	23	Time.	Mag.	Time.	Mag.	
′	′	′	′	′	′	′	′	′	H. M.	′	H. M.	′	
2·8	3·0	3·0	3·1	3·2	3·3	3·5	3·3	3·5	11 19	1·4	6 53	5·6	1
2·9	2·9	2·9	3·0	3·2	3·4	3·6	3·6	3·6	4 45	0·4E	0 13	4·4	2
3·0	3·1	3·2	3·2	3·2	3·3	3·4	3·5	3·7	4 17	0·7	7 11	5·0	3
2·6	2·9	3·3	3·2	3·1	3·2	3·2	3·5	3·8	4 33	0·3	8 37	6·2	4
2·7	2·8	3·0	3·0	3·0	3·0	3·1	3·1	3·3	5 1	1·1	9 19	4·6	5
3·0	3·0	3·2	3·1	3·0	2·9	3·2	3·4	3·5	4 21	1·3	2 2	4·0	6
2·9	3·0	3·0	3·2	3·2	3·2	3·2	3·2	3·3	4 23	0·9	8 25	4·3	7
3·1	3·2	3·3	3·2	3·3	3·3	3·3	3·3	3·3	4 21	0·1	7 5	4·0	8
2·4	2·7	2·7	2·8	2·8	2·9	3·0	3·2	3·0	4 23	0·5	9 53	4·3	9
3·1	3·1	3·1	3·1	3·0	3·0	3·0	3·0	3·1	4 33	0·5	6 51	5·1	10
2·9	3·1	3·1	3·1	3·1	3·1	3·1	3·1	3·1	3 45	2·2	6 49	5·8	11†
3·1	3·0	3·1	3·1	3·0	3·0	3·0	2·9	3·1	4 29	0·0	8 55	5·2	12†
3·1	3·1	3·1	3·0	3·1	3·1	3·1	3·1	3·1	4 21	1·0	7 11	5·1	13†
3·2	3·2	3·2	3·2	3·1	3·1	3·1	3·2	3·4	4 11	1·1	7 49	4·2	14†
3·1	3·1	3·2	3·2	3·2	3·4	3·6	3·5	4·2	3 2	5 47	0·8	7 57	4·8	15
3·2	3·2	3·3	3·4	3·4	3·4	3·5	3·6	3·8	3 1	5 25	0·6	0 29	4·7	16
3·0	3·1	3·2	3·2	3·3	3·3	3·4	3·5	3·6	3·2	4 57	1·5	8 21	4·7	17
2·8	2·9	3·0	3·1	3·1	3·1	3·1	3·4	3·7	3·3	4 39	2·2	7 41	4·2	18
3·0	2·9	3·1	3·2	3·2	3·2	3·3	3·3	3·3	3·1	5 59	1·0	2 2	4·4	19
3·3	3·3	3·3	3·3	3·3	3·3	3·5	3·7	4·1	3·0	5 37	2·0	7 33	4·8	20
3·3	3·2	3·2	3·2	3·3	3·3	3·3	3·5	3·7	3·2	4 49	1·2	1 29	4·8	21
3·1	3·2	3·1	3·1	3·1	3·1	3·3	3·5	3·7	3·5	4 31	2·1	2 9	4·3	22
3·3	3·3	3·3	3·3	3·3	3·1	2·9	3·0	3·0	3·3	4 5	1·3	7 49	4·6	23
3·5	3·3	3·2	3·1	3·1	3·0	3·3	3·6	3·9	3·7	4 45	2·9	7 45	5·0	24
3·3	3·4	3·3	3·1	3·0	2·8	2·7	2·7	2·8	3·2	9 33	1·5	2 15	4·9	25
3·4	3·4	3·4	3·5	3·1	2·9	2·7	2·7	2·8	3·4	4 53	2·2	7 33	5·3	26
2·8	2·9	2·9	2·2	2·5	2·9	3·0	3·0	2·9	2·9	11 51	1·2	7 45	4·3	27
3·2	3·3	3·0	2·9	2·9	3·1	3·2	3·1	3·3	2·9	11 26	1·2	7 1	4·5	28
2·8	3·1	3·0	2·9	2·9	3·1	3·1	3·3	3·4	3·1	4 9	1·4	6 49	4·7	29
3·0	3·2	3·3	3·3	3·5	3·3	3·5	3·1	3·2	2·9	4 49	0·9	7 13	4·2	30
3·2	3·2	3·2	3·2	3·2	3·2	3·2	3·3	3·6	3·4	3 53	1·9	7 5	4·2	31†
3·0	3·1	3·5	3·1	3·1	3·1	3·2	3·3	3·4	3·2					Mean.
3·1	3·1	3·1	3·1	3·1	3·1	3·1	3·1	3·2	3·2					Mean†

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3·2	3·1	3·6	3·5	3·5	3·5	3·6	3·5	3·6	3·1	4 41	0·4	7 53	4·4	1
3·1	3·1	3·1	3·1	3·4	3·3	3·1	3·1	3·8	3·1	4 33	0·7	9 57	4·5	2
2·7	2·6	2·6	2·8	3·0	3·3	3·3	3·5	3·7	3·0	4 55	0·9	1 1	4·2	3
2·9	3·0	3·1	3·0	2·9	3·0	3·1	3·5	3·8	3·5	5 0	1·9	1 29	4·9	4
2·8	3·0	3·4	2·9	3·3	3·4	3·6	3·8	3·7	3·5	5 21	2·4	1 49	5·1	5
3·6	3·5	3·5	3·6	3·3	3·1	3·3	3·5	3·7	3·5	11 1	2·6	6 49	4·3	6
3·5	3·6	3·6	3·5	3·4	3·1	3·0	3·0	3·1	3·1	5 35	1·0	8 53	4·1	7
3·6	3·6	3·6	3·1	3·1	3·0	2·9	2·7	2·8	3·1	9 29	1·8	1 57	4·2	8†
3·5	3·5	3·6	3·4	3·5	3·5	3·5	3·5	3·6	3·6	0 39	3·0	2 39	4·1	9†
3·7	3·4	3·3	3·1	3·1	3·0	3·0	3·1	3·2	3·1	8 23	1·9	12 57	4·3	10†
3·5	3·3	3·2	3·2	3·1	3·3	3·6	3·7	3·9	3·6	8 17	2·9	2 9	4·7	11†
3·2	3·2	3·3	3·3	3·2	3·3	3·4	3·8	4·5	3·6	8 53	3·1	7 31	4·7	12
3·3	3·2	3·1	2·9	2·6	2·8	2·8	2·9	3·2	2·9	8 53	2·5	7 21	4·8	13
3·1	3·1	3·1	3·1	3·1	3·1	3·1	2·8	3·1	3·5	3 57	2·7	9 49	4·8	14
3·5	3·5	3·4	3·3	3·3	2·9	2·7	2·8	3·2	3·5	20 49	2·5	6 33	4·6	15
3·3	3·3	3·3	3·3	3·3	3·2	3·2	3·2	3·2	3·4	11 13	2·3	6 57	4·6	16
3·9	3·7	3·7	3·7	3·7	3·5	3·5	3·5	3·8	3·7	4 9	2·6	9 13	4·8	17
3·8	3·6	3·5	3·1	3·0	3·3	3·3	3·5	4·0	3·5	5 1	2·0	2 9	4·8	18
3·8	3·7	3·3	3·0	2·9	3·0	3·1	3·1	3·3	3·8	18 9	2·8	2 51	5·5	19
3·7	3·6	3·5	3·2	2·8	2·4	2·7	2·7	2·7	3·2	5 57	0·7	2 9	4·9	20
3·8	3·6	3·7	3·4	3·1	3·0	3·1	3·1	3·3	3·2	2 40	2·2	12 1	4·8	21
3·8	3·8	3·7	3·4	3·2	3·1	3·2	3·3	3·3	3·2	8 16	2·0	1 49	4·6	22
3·5	3·7	3·8	3·8	3·7	3·7	3·7	3·8	3·9	3·4	4 29	2·3	9 21	4·1	23
3·4	3·3	3·3	3·5	3·5	3·4	3·5	3·5	3·6	3·6	11 5	3·1	7 49	4·6	24†
3·3	3·2	3·4	3·3	3·0	3·1	3·5	3·7	3·6	3·5	11 37	2·4	2 9	4·5	25
3·9	3·2	3·3	3·4	3·4	3·4	3·3	3·3	3·4	3·2	12 6	1·2	7 49	4·4	26
3·9	3·8	3·6	3·8	3·8	3·7	3·6	3·7	3·2	3·4	11 21	2·2	7 31	4·7	27
2·6	2·7	3·3	3·5	3·5	3·6	3·7	3·8	3·5	3·2	4 59	1·7	9 23	4·4	28
3·8	3·8	3·8	3·8	3·8	3·8	3·9	3·9	3·9	3·5	4 49	1·3	8 1	5·2	29
3·4	3·4	3·4	3·3	3·3	3·2	3·3	3·3	3·5	3·4					Mean.
3·5	3·4	3·4	3·3	3·3	3·3	3·3	3·3	3·4	3·4					Mean†

* The daily mean value of declination derived from 24 hourly values has been corrected for progressive change by 1/48 of the difference between the values of the initial and terminal hours.

†Five international quiet days.

‡ All the figures in this table indicate *westerly* declination except those followed by 'E', which represent *easterly* declination.

(Averages for periods of sixty minutes centered at the full hours of Greenwich mean time.)

MARCH. 0° PLUS TABULAR QUANTITIES.

Date.	Hours (G. M. T.)														
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	3·8	3·6	3·3	2·6	2·1	2·8	3·9	4·4	4·5	4·4	3·9	3·0	3·1	3·6	3·5
2†	3·6	3·5	3·0	2·1	1·4	2·7	4·4	4·0	4·2	3·7	2·5	2·1	2·7	3·5	3·9
3	3·8	3·9	3·7	2·5	1·7	1·9	2·3	2·9	3·1	3·5	3·1	2·9	3·1	3·6	3·7
4†	3·8	3·9	3·8	2·7	2·2	2·1	2·0	3·8	4·0	4·0	4·0	4·1	4·0	3·9	3·9
5†	3·9	3·8	3·3	2·1	1·5	1·9	2·5	3·6	4·9	5·5	5·0	4·2	4·1	4·0	3·9
6	4·1	3·9	3·9	2·7	1·7	1·1	1·6	2·7	4·5	5·3	4·8	3·9	3·3	3·2	3·5
7	4·0	4·0	3·8	2·9	2·0	2·1	2·6	3·4	4·5	5·1	4·4	3·5	3·3	3·2	3·1
8	3·8	3·8	3·3	2·4	1·2	0·9	1·4	2·7	4·2	5·0	4·5	3·6	3·2	3·5	3·7
9†	3·6	3·7	3·5	2·8	2·0	1·5	2·3	4·1	6·0	6·4	5·2	3·8	3·1	3·5	3·7
10	3·4	3·4	2·9	1·7	0·6	0·3	1·5	2·6	3·9	4·8	4·6	4·0	3·7	3·7	3·9
11	3·9	4·2	4·0	2·8	1·8	1·4	1·5	2·6	3·9	3·4	3·5	1·7	2·2	3·0	1·8
12	3·4	3·7	3·1	2·2	1·8	2·1	2·7	4·0	4·9	5·8	5·4	4·6	3·9	3·6	3·5
13	3·8	3·9	3·8	3·1	2·1	1·3	1·9	3·5	4·8	5·6	5·2	4·5	4·3	3·9	3·2
14	3·6	3·2	2·8	1·7	1·6	1·9	2·3	3·2	4·1	4·6	3·9	2·7	3·7	3·8	3·0
15	3·8	3·9	3·1	1·7	0·1	0·5E	0·4	2·2	4·3	4·7	4·1	3·6	3·7	3·8	3·5
16	3·8	3·8	3·2	2·2	1·4	1·4	1·8	3·0	4·3	4·8	4·6	4·4	4·4	4·5	4·2
17	4·0	4·2	3·4	2·1	0·8	0·5	1·1	2·7	3·9	3·8	3·5	2·9	3·3	3·7	3·7
18	3·6	3·8	3·6	2·9	2·1	1·8	2·5	3·4	4·0	4·5	3·4	3·0	3·8	4·1	3·8
19	4·3	4·4	3·7	2·6	2·7	1·2	1·7	2·6	2·8	2·7	2·5	2·8	3·5	4·1	4·1
20	4·0	4·1	3·4	2·3	1·8	1·8	1·9	3·1	4·0	4·2	3·8	3·4	3·6	3·8	4·0
21	4·1	4·0	3·3	2·6	1·6	0·6	1·1	2·8	4·0	4·0	3·3	3·0	3·0	3·2	3·6
22	3·6	3·7	3·5	2·2	1·6	1·4	2·7	3·9	4·7	4·0	3·3	2·7	2·5	2·9	3·6
23	3·2	3·3	2·8	2·2	1·9	2·1	3·6	5·2	6·0	4·3	4·0	3·3	3·3	3·8	3·8
24	3·6	3·5	2·5	0·7	0·1E	0·1E	1·6	3·1	3·8	4·3	4·2	4·0	3·5	3·4	3·4
25	3·8	3·8	3·0	1·8	1·5	2·2	3·5	5·3	5·9	5·3	4·1	2·9	3·1	3·4	3·3
26	3·5	3·5	2·8	1·9	1·6	1·7	2·3	3·1	4·1	3·8	3·0	2·7	3·1	3·5	3·6
27	3·6	3·8	2·9	1·8	2·5	3·5	5·0	5·7	5·6	4·4	3·4	3·1	3·1	3·7	3·8
28	3·7	3·7	3·0	1·9	1·1	2·1	3·3	4·3	4·9	3·8	3·0	2·8	3·1	3·7	4·0
29	4·0	4·0	4·1	1·7	1·0	1·5	2·4	3·5	3·7	3·0	2·5	2·5	2·6	3·0	3·6
30	3·8	3·4	2·1	1·2	1·7	2·2	3·2	4·5	4·5	3·8	4·3	4·1	4·0	3·8	3·8
31†	3·6	2·9	1·4	0·2	0·3	2·0	3·6	4·5	4·3	3·8	2·3	2·5	2·9	3·6	3·7
Mean	3·7	3·7	3·2	2·1	1·5	1·6	2·3	3·5	4·4	4·4	3·9	3·4	3·4	3·6	3·6
Mean†	3·7	3·6	3·0	2·0	1·5	2·0	3·0	4·0	4·7	4·7	3·9	3·4	3·4	3·7	3·8

APRIL.

1	3·5	2·9	1·7	0·6	0·4	2·0	4·2	6·9	7·9	7·4	5·8	4·7	3·8	4·4	4·7
2	3·8	3·7	2·4	1·3	0·8	1·1	3·5	6·1	6·3	5·1	4·5	3·6	3·3	3·5	3·5
3	4·0	3·4	1·9	0·5	0·3	2·3	5·4	7·6	7·5	6·3	4·4	2·8	2·3	2·7	2·6
4	3·1	3·0	1·7	0·8	2·3	3·4	5·2	6·4	6·3	5·9	4·8	3·5	2·8	3·1	3·8
5	3·2	2·7	1·3	0·2	0·9	2·9	4·4	6·0	6·8	5·7	5·3	4·5	4·0	4·1	3·9
6	3·9	3·2	1·8	0·5	0·4	0·3	3·3	5·1	5·7	6·2	5·7	5·0	4·3	3·9	3·9
7	2·9	2·7	1·7	1·3	1·8	2·6	4·2	6·2	7·1	6·7	5·7	4·5	3·7	3·6	4·1
8	3·5	3·0	2·2	1·8	1·6	2·3	3·9	5·7	6·3	6·1	5·3	3·9	3·2	3·2	3·3
9	3·1	2·9	1·3	0·9	1·8	2·5	3·5	7·0	7·2	5·7	4·4	3·4	2·7	2·5	2·8
10	3·7	3·6	1·7	0·5	0·5	1·6	3·7	5·5	6·2	5·6	4·7	3·9	3·5	3·1	3·6
11	3·9	3·7	2·5	2·0	2·2	3·4	4·7	5·7	6·4	6·4	5·6	4·7	3·8	3·5	3·9
12†	3·8	3·6	2·6	1·4	1·2	2·5	4·0	5·3	5·9	5·6	4·8	4·0	3·3	2·6	3·9
13†	3·8	3·4	2·3	1·4	1·8	3·3	4·3	5·8	6·2	6·1	5·3	4·6	3·8	3·5	3·9
14	3·8	3·1	1·7	0·8	0·7	2·1	4·0	5·7	6·8	5·9	5·1	4·7	4·5	4·4	4·6
15	3·9	3·1	2·9	0·7	1·1	2·9	4·7	6·2	6·9	6·1	5·0	4·3	4·0	4·2	4·6
16	3·3	3·4	1·9	1·2	1·0	1·9	3·5	4·7	5·0	5·2	4·9	4·3	3·9	3·9	4·1
17	2·5	2·0	1·5	1·3	2·0	4·7	5·7	6·2	5·7	4·9	4·3	4·3	4·2	3·7	3·7
18	3·3	3·1	2·0	1·0	0·5	1·5	3·6	5·5	5·9	5·5	4·3	3·4	3·3	3·3	3·6
19	3·6	2·5	1·2	0·2	1·0	2·8	5·2	6·7	7·1	6·5	5·3	4·1	3·2	3·3	3·9
20	3·5	3·2	2·0	0·5	0·4	1·6	3·9	5·7	6·5	6·0	5·0	4·0	3·1	2·9	3·4
21	3·7	3·4	2·3	1·2	1·6	4·1	6·0	7·6	7·3	6·3	5·3	4·4	4·2	4·3	4·3
22	3·3	2·9	2·0	1·3	1·0	1·4	3·0	4·6	5·4	5·3	4·7	3·9	3·5	3·4	3·6
23	3·7	3·5	2·9	2·6	2·7	3·8	4·9	6·3	6·8	6·4	5·5	4·7	3·9	3·8	3·8
24	3·4	3·4	2·7	2·1	2·0	2·7	4·2	5·5	6·5	6·2	5·5	4·5	3·8	3·5	3·6
25†	3·4	2·2	1·9	1·2	1·1	1·9	2·9	4·3	5·2	5·2	5·2	4·6	3·9	3·1	3·5
26	3·4	2·7	0·9	0·0	0·6	2·4	4·1	5·2	5·7	5·3	4·9	4·0	3·1	3·0	3·4
27	3·4	2·5	1·2	1·5	2·4	3·9	5·2	6·2	6·8	6·3	6·1	5·4	4·3	3·8	3·9
28†	3·3	2·2	0·9	1·0	1·6	3·0	4·3	5·2	5·1	4·8	4·1	3·2	2·8	3·1	3·7
29†	3·3	2·7	0·9	0·9	0·1	2·9	3·4	3·8	4·9	4·0	3·5	2·9	2·6	2·9	3·8
30	3·7	2·8	1·3	0·2	1·1	3·6	6·1	7·0	6·6	6·2	5·6	4·8	4·2	3·6	4·0
Mean	3·5	3·1	1·9	1·0	1·2	2·5	4·3	5·8	6·3	5·9	5·1	4·2	3·6	3·5	3·8
Mean†	3·5	3·0	1·7	1·0	1·1	2·5	3·8	4·9	5·3	5·1	4·6	3·9	3·3	3·3	3·8

†Five international quiet days.

‡ All the figures in this table indicate *westerly* declination, except those followed by 'E' which represent *easterly* declination.

(Averages for Periods of sixty minutes centered at the full hours of Greenwich mean time.)

MARCH. 0° PLUS TABULAR QUANTITIES.

Hours. (G. M. T.)									Mean.*	Maximum.		Minimum.		Date.
15	16	17	18	19	20	21	22	23		Time.	Mag.	Time.	Mag.	
′	′	′	′	′	′	′	′	′	′	H. M.	′	H. M.	′	
3·3	3·1	3·2	3·5	3·4	3·4	3·4	3·4	3·5	3·4	3 48	1·9	7 57	5·0	1
3·9	3·8	3·8	3·8	3·8	3·7	3·8	3·8	3·8	3·8	3 49	1·3	8 25	4·5	2†
3·7	3·7	3·7	3·7	3·5	3·5	3·5	3·7	3·9	3·6	4 49	1·6	13 29	4·1	3
3·9	3·9	3·9	3·8	3·8	3·8	3·1	3·1	3·9	3·7	4 29	1·9	11 33	4·2	4†
3·8	3·9	3·9	3·9	3·8	3·8	3·8	3·9	4·0	3·7	4 24	1·2	8 37	5·6	5†
3·6	3·5	3·6	3·4	3·1	3·3	3·9	3·9	3·9	3·4	4 25	1·0	8 41	5·7	6
3·1	3·2	3·3	3·1	2·9	2·9	3·0	3·1	3·3	3·3	4 53	1·7	8 57	5·4	7
3·8	3·8	3·7	3·7	3·3	3·3	3·5	3·6	3·7	3·3	5 21	0·7	8 37	5·3	8
3·5	3·5	3·5	3·4	3·4	3·4	3·4	3·3	3·4	3·6	4 53	1·3	8 49	5·7	9†
3·9	3·9	3·6	3·2	2·5	3·6	3·7	3·7	3·9	3·2	4 45	0·3	9 13	4·9	10
0·7	1·1	2·1	1·8	1·5	1·5	1·9	2·7	3·1	2·4	16 25	0·8E	8 29	4·6	11
3·0	2·7	2·8	2·8	2·8	2·8	3·1	3·1	3·6	3·4	4 9	1·6	1	6·0	12
2·6	2·7	2·0	2·6	1·9	1·9	2·8	2·7	3·0	3·2	5 5	1·2	8 57	5·9	13
3·0	3·1	3·1	2·7	2·5	2·8	3·2	3·4	3·8	3·1	4 5	1·5	8 19	4·6	14
3·3	3·2	3·0	3·0	3·0	3·1	3·3	3·5	3·9	3·0	4 46	0·7E	8 37	5·0	15
3·7	3·5	3·6	3·7	3·6	3·7	3·7	3·8	3·8	3·3	4 52	1·1	8 55	5·1	16
3·5	3·3	3·2	3·0	3·0	3·0	3·0	3·3	3·4	3·0	5 1	0·4	8 21	4·5	17
3·6	3·6	3·5	3·5	3·4	3·6	3·8	3·8	4·0	3·5	4 21	1·7	8 49	4·7	18
3·6	3·3	3·6	3·6	3·6	3·4	3·6	3·7	3·9	3·3	4 33	1·1	12 53	4·9	19
3·8	3·6	3·6	3·6	3·6	3·5	3·6	3·7	4·1	3·4	4 25	1·3	8 53	4·4	20
3·5	3·5	3·1	3·0	3·0	3·0	3·1	3·2	3·4	3·0	5 9	0·7	8 53	4·4	21
3·3	3·3	3·3	3·2	3·0	3·1	3·0	3·1	3·2	3·1	5 5	1·0	7 51	4·8	22
4·0	4·0	3·9	3·9	3·6	3·6	3·8	3·8	3·7	3·6	4 53	1·7	6 57	5·5	23
3·9	3·9	3·9	3·9	3·6	3·6	3·6	3·7	3·7	3·1	4 53	0·3E	9 33	4·8	24
2·9	3·1	3·7	3·7	3·6	3·5	3·6	3·5	3·5	3·5	3 29	1·3	7 47	5·0	25
3·5	3·6	3·5	3·4	3·6	3·6	3·6	3·6	3·7	3·2	4 25	1·1	8 9	4·3	26
3·8	3·7	3·7	3·6	3·6	3·7	3·6	3·6	3·7	3·6	3 53	1·4	8 29	5·0	27
4·0	4·0	4·0	3·9	3·6	3·5	3·5	3·6	3·8	3·4	4 21	0·6	7 53	5·0	28
3·7	3·7	3·7	3·7	3·7	3·7	3·7	3·7	3·7	3·2	4 9	0·9	1 1	4·2	29
3·8	3·9	3·9	3·8	3·6	3·4	3·9	4·0	3·8	3·5	3 9	1·1	7 19	4·9	30
3·7	3·6	3·6	3·6	3·6	3·6	3·6	3·6	3·6	3·1	3 29	0·0	6 49	4·7	31†
3·5	3·4	3·4	3·4	3·3	3·3	3·4	3·5	3·7	3·3					Mean.
3·7	3·7	3·7	3·7	3·7	3·7	3·7	3·7	3·7	3·5					Mean†.

APRIL.

4·3	3·9	3·7	3·4	3·2	3·1	2·1	2·3	3·3	2·9	3 33	0·3	8 5	8·3	1
3·5	3·6	3·6	3·5	3·5	3·6	3·7	4·1	4·3	3·6	4 49	0·9	7 41	6·9	2
2·7	2·7	3·1	3·0	3·2	3·6	3·6	3·5	3·4	3·4	4 9	0·2	7 13	8·0	3
3·5	3·3	3·2	2·8	2·8	3·0	2·9	3·3	3·4	3·5	2 48	0·6	6 29	6·7	4
3·7	3·6	3·6	3·6	3·6	3·5	3·5	3·6	3·8	3·7	3 7	0·1E	8 9	6·9	5
3·8	3·8	3·7	3·6	3·3	2·5	2·6	2·4	2·7	3·6	3 37	0·2	9 37	5·8	6
4·2	4·2	3·8	3·7	3·5	3·3	3·1	3·3	3·3	3·8	3 6	1·2	8 19	7·2	7
3·6	3·5	3·4	3·2	3·1	2·9	2·8	2·9	3·1	3·5	3 48	1·5	7 57	6·6	8
3·4	3·3	3·4	3·4	3·7	3·6	3·6	3·7	3·8	3·7	3 13	0·0	8 19	7·3	9
4·1	4·0	3·4	3·1	3·1	3·1	3·3	3·6	3·3	3·4	3 16	0·0	7 57	6·7	10
4·1	3·9	3·8	3·7	3·5	3·5	3·6	3·8	3·8	4·0	3 9	1·0	8 21	6·6	11
4·0	3·9	3·9	3·9	3·7	3·6	3·6	3·7	3·8	3·7	4 33	1·1	7 49	6·1	12†
4·1	4·0	4·0	4·0	3·8	3·5	3·5	3·7	3·8	3·9	3 17	1·3	7 39	6·6	13†
4·4	4·0	3·9	3·9	3·9	3·9	3·9	3·9	4·0	3·9	3 37	0·5	8 1	7·1	14
4·6	4·4	4·4	4·1	3·6	3·3	3·0	3·0	3·1	3·9	2 57	0·5	7 45	7·3	15
4·3	4·0	3·7	3·2	3·2	3·2	3·4	3·2	3·5	3·5	3 53	0·9	8 39	5·4	16
3·7	3·5	3·5	3·5	3·4	3·3	3·3	3·3	3·3	3·7	3 21	0·8	7 59	6·4	17
3·9	3·9	3·5	3·5	3·3	3·3	3·4	3·6	3·7	3·4	5	0·4	7 37	6·2	18
4·0	3·7	3·4	3·2	3·1	2·9	2·9	2·9	3·1	3·6	3 21	0·1	7 49	7·2	19
3·8	3·9	3·7	3·5	3·2	3·1	3·7	4·3	3·5	3·5	3 25	0·3	8 19	6·6	20
4·1	3·5	3·3	3·3	3·1	2·9	3·3	3·3	3·3	4·0	3 33	1·3	7 39	6·1	21
3·9	3·8	3·6	3·6	3·3	3·4	3·3	3·4	3·4	3·4	4 13	0·9	8 39	5·6	22
4·1	4·0	3·2	3·2	3·2	3·0	3·0	3·1	3·2	4·0	3 9	2·5	8 25	6·9	23
3·7	3·8	3·8	3·7	3·6	3·5	3·6	3·5	3·5	3·9	3 45	1·9	8 25	6·6	24
4·0	4·0	3·9	3·8	3·4	3·5	3·2	3·4	3·6	3·5	3 27	1·0	8 57	6·4	25†
3·9	3·7	3·7	3·8	3·7	3·6	3·8	3·9	3·9	3·5	3 5	0·0	8 1	5·9	26
4·1	4·1	3·9	3·8	3·8	3·9	3·9	3·9	3·8	4·1	3 17	1·1	8 17	6·9	27
3·9	3·8	3·7	3·7	3·6	3·6	3·6	3·5	3·6	3·4	2 25	0·8	7 21	5·4	28†
4·0	4·0	4·0	4·0	4·0	3·8	3·5	3·5	3·8	3·1	3 15	0·3E	7 29	4·1	29†
4·2	4·3	4·2	4·0	3·8	3·5	3·5	3·5	3·5	4·0	3 21	0·1	7 13	7·1	30
3·9	3·8	3·7	3·6	3·5	3·4	3·4	3·5	3·5	3·7					Mean.
4·0	4·0	3·9	3·8	3·7	3·6	3·6	3·6	3·7	3·5					Mean†.

*See footnote on page 89.

†Five international quiet days.

‡ All the figures in this table indicate *westerly* declination, except those followed by 'E' which represent *easterly* declination.

(Averages for periods of *sixty* minutes centered at the full hours of Greenwich mean time.)

MAY. 0° PLUS TABULAR QUANTITIES.

Date.	Hours (G. M. T.).														
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1†	3·4	3·1	2·3	1·9	2·7	5·5	6·8	7·9	7·9	6·7	5·2	4·0	3·9	4·0	3·9
2†	3·7	2·4	1·0	0·8	1·7	3·9	5·8	6·7	6·9	6·4	5·9	5·1	4·1	3·9	4·0
3†	3·5	2·2	0·1E	1·6	1·6	4·4	5·7	6·9	6·9	6·2	5·1	4·1	3·9	3·9	4·0
4	3·7	3·4	2·0	1·8	2·4	3·8	5·1	6·5	6·9	6·3	5·0	3·9	2·8	2·8	3·9
5	3·6	2·5	0·9	0·4	1·1	3·5	5·6	7·0	7·6	7·5	6·6	6·0	5·9	4·8	4·8
6	2·6	2·3	1·0	0·6	1·5	2·8	4·4	5·7	6·2	6·9	6·0	4·8	4·0	3·3	3·5
7	3·4	2·7	0·6	0·3E	0·3E	1·9	4·1	5·5	6·5	6·1	5·0	4·0	3·3	2·7	3·4
8	2·9	1·7	0·3E	0·5E	0·2	1·7	4·1	5·6	6·7	5·5	4·8	3·9	3·5	3·1	3·6
9	2·9	1·9	0·4	0·1E	0·5	2·4	4·1	4·9	4·9	4·4	4·0	2·7	2·6	3·3	3·8
10	3·6	2·8	2·6	2·5	3·3	5·2	6·6	6·7	6·6	5·6	5·1	4·1	3·6	4·4	3·8
11	3·6	1·5	0·4	0·1	1·3	3·1	4·7	6·3	7·5	7·1	6·0	4·9	3·8	3·7	3·5
12	1·9	1·0	0·7	1·0	1·3	4·0	5·4	7·2	8·3	7·6	5·8	4·7	3·9	2·5	2·5
13	3·2	2·4	0·5	0·5E	0·4	2·0	3·7	4·6	5·4	5·7	5·3	3·9	3·5	3·6	3·7
14	2·4	1·5	1·3	1·7	2·8	3·3	3·9	5·1	6·3	4·7	4·3	2·5	3·5	3·3	3·5
15	2·6	1·8	0·7	0·5	1·4	3·6	5·1	6·4	6·4	6·4	4·7	3·8	3·5	3·6	4·2
16	2·4	2·4	1·4	1·3	2·6	5·0	6·7	7·3	6·5	5·9	4·9	3·5	2·6	3·5	4·1
17	2·8	1·9	0·7	0·2	2·2	4·0	5·3	5·8	6·5	5·7	4·6	3·8	3·5	3·5	3·6
18	3·3	2·7	1·2	0·4	0·5	1·8	3·8	5·3	5·5	4·7	4·5	4·5	4·3	3·7	3·5
19	3·4	2·6	1·9	2·0	2·3	3·6	4·6	5·6	5·9	5·4	4·8	4·5	4·0	3·8	3·8
20	3·3	2·0	1·1	0·5	1·2	2·6	4·2	4·9	5·6	5·6	4·5	3·7	3·2	3·0	3·5
21	3·3	2·1	0·7	0·3	1·1	3·4	4·5	5·5	5·6	5·4	4·7	3·8	3·3	3·4	3·8
22†	3·5	2·9	1·9	1·3	1·7	3·3	4·8	5·7	6·1	5·7	4·5	3·7	3·5	3·4	3·5
23	3·8	2·8	1·7	1·6	1·8	3·5	4·9	5·9	6·8	6·7	5·6	4·9	4·6	4·5	4·4
24	4·3	3·8	2·5	1·6	2·2	3·5	5·7	6·8	6·8	6·3	5·4	4·5	4·3	4·3	4·3
25	3·8	2·6	1·2	1·0	1·2	2·7	3·5	4·5	5·5	5·5	4·8	4·2	3·5	3·5	3·5
26†	3·8	2·6	1·6	1·3	1·5	2·7	3·7	4·9	5·6	5·1	4·4	4·0	3·4	3·3	3·5
27	3·3	0·8E	1·5	1·4	2·9	5·4	7·2	8·5	8·4	8·8	5·6	4·4	3·6	3·6	4·4
28	1·3	0·1	1·9E	1·5E	0·0	3·1	3·3	4·1	4·0	3·8	2·8	1·2	1·3	0·2	1·1
29	2·3	0·8	1·0E	1·2E	1·1	3·2	4·3	5·2	5·7	4·9	3·2	3·1	2·9	2·4	2·5
30	2·2	0·8	0·1	0·3	0·9	2·6	4·3	5·8	6·6	6·2	5·5	4·3	4·2	3·6	3·5
31	2·6	1·3	0·1	0·1	1·3	3·5	4·7	6·2	6·5	6·5	5·8	5·0	4·3	4·2	4·3
Mean . .	3·1	2·1	0·9	0·6	1·5	3·4	4·8	5·9	6·4	5·9	5·0	4·1	3·6	3·4	3·7
Mean† . .	3·5	2·6	1·4	1·0	1·8	4·0	5·3	6·4	6·7	6·0	5·0	4·2	3·8	3·7	3·8

JUNE.

1	2·3	2·1	1·1	1·1	1·2	2·7	3·7	4·8	5·8	6·3	5·3	5·3	4·5	4·0	4·1
2	2·3	1·5	1·3	1·9	3·1	4·7	5·8	6·7	7·3	7·1	7·1	6·3	5·6	4·3	4·1
3	3·2	2·2	1·0	0·5	1·4	3·4	4·2	5·0	5·3	6·1	6·0	5·1	4·2	3·2	3·5
4	3·3	2·0	0·2	0·1	0·4	2·2	3·6	4·5	5·3	5·1	4·6	4·6	4·2	4·2	4·1
5	3·3	2·2	1·4	1·3	2·0	3·1	3·6	5·1	5·7	5·6	5·7	5·4	5·2	4·5	4·6
6	3·1	2·4	1·7	1·4	2·3	3·2	4·7	6·3	7·4	7·0	5·9	5·1	4·6	4·2	4·3
7	3·2	2·5	1·5	0·9	1·2	2·8	4·9	6·1	6·1	5·6	5·5	4·8	4·2	3·7	3·8
8	3·6	1·3	0·7	0·9	1·7	3·4	4·7	6·3	7·0	6·1	4·7	4·6	4·1	4·0	4·1
9	3·1	3·1	2·2	1·2	0·9	1·5	2·7	4·0	4·7	4·7	4·0	4·5	4·1	3·7	3·7
10†	3·4	3·2	1·9	1·2	1·4	2·8	3·8	4·7	5·3	5·4	6·1	5·9	5·3	4·6	4·2
11†	3·8	3·3	2·4	2·0	1·8	2·6	3·7	4·8	5·3	5·3	5·1	4·3	4·5	4·5	4·5
12	3·1	2·5	1·5	0·9	1·3	2·6	3·6	4·7	5·1	4·5	4·4	4·0	3·9	4·4	4·9
13	3·1	2·2	1·7	1·4	2·3	3·3	4·4	6·7	6·5	5·7	5·0	4·9	2·8	3·3	4·1
14	3·1	2·0	1·5	1·1	2·2	3·2	4·7	5·1	5·3	5·3	5·1	4·4	3·9	4·0	4·1
15	3·4	3·2	3·1	3·4	4·2	4·8	5·7	6·3	6·5	5·7	4·8	4·4	3·6	3·7	3·8
16†	3·4	2·2	1·6	1·4	1·6	2·4	3·6	4·8	5·4	5·8	5·0	4·4	4·3	4·2	4·2
17†	3·3	3·1	2·9	2·1	3·6	4·2	5·6	6·3	6·2	5·1	4·5	3·9	3·9	3·9	3·4
18	3·8	3·0	1·8	2·1	3·4	5·1	6·5	7·1	6·9	6·2	5·1	4·4	4·0	3·4	3·6
19	3·6	2·6	1·3	1·2	1·7	3·8	6·5	8·1	7·1	6·2	5·4	4·6	3·9	3·2	2·7
20	3·6	2·5	1·3	1·2	2·9	5·2	6·4	7·5	7·7	7·3	6·8	5·5	5·0	4·4	4·9
21	4·0	3·1	1·6	1·2	2·2	3·8	5·3	6·1	5·7	5·7	5·0	4·9	3·3	3·5	3·6
22	3·3	3·2	2·9	2·4	3·2	4·7	6·1	7·0	7·2	6·5	6·0	4·2	4·1	2·5	3·4
23	2·3	1·8	0·7	0·1	1·3	3·1	4·9	6·2	6·9	6·4	5·7	5·7	5·3	4·8	4·0
24	2·7	2·0	1·4	0·5	1·2	2·6	3·5	4·7	5·6	5·7	4·9	4·6	4·6	4·3	3·9
25	3·2	3·4	2·9	2·1	2·1	2·5	4·2	5·6	6·5	6·6	6·5	5·6	4·8	4·1	4·1
26	2·7	1·7	0·4	0·4	1·0	1·9	3·3	4·6	5·2	5·1	5·2	5·1	4·9	4·2	4·3
27†	3·1	2·2	1·8	2·9	3·6	4·2	5·1	7·1	7·4	6·5	5·9	4·9	4·6	3·9	3·7
28	2·8	1·7	1·0	1·0	1·5	2·0	3·3	4·8	6·2	6·3	6·0	5·5	4·7	3·8	3·9
29	4·1	2·8	0·6	0·7E	0·3E	1·8	4·3	5·7	6·0	5·8	5·5	4·9	4·5	4·5	4·7
30	3·5	2·8	1·5	1·0	1·0	1·8	2·5	3·4	4·1	4·3	5·1	5·1	4·8	4·1	4·3
Mean .	3·2	2·5	1·5	1·3	1·9	3·2	4·5	5·6	6·1	5·9	5·5	4·8	4·4	3·9	4·1
Mean† .	3·4	2·8	2·0	1·9	2·1	3·1	4·2	5·4	6·0	5·7	5·4	4·8	4·5	4·1	4·0

†Five international quiet days.

‡All the figures in this table indicate *westerly* declination except those followed by ' E ', which represent *easterly* declination.

(Averages for periods of sixty minutes centered at the full hours of Greenwich mean time.)

MAY. 0° PLUS TABULAR QUANTITIES.

Hours (G. M. T.)									Mean.*	Maximum.		Minimum.		Date.
15	16	17	18	19	20	21	22	23		Time.	Mag.	Time.	Mag.	
′	′	′	′	′	′	′	′	′	′	H. M.	′	H. M.	′	
4·9	4·2	3·9	4·0	4·0	3·7	3·0	3·7	3·6	4·6	3 7	1·8	7 29	8·3	1†
4·3	4·1	3·8	3·9	3·7	3·7	3·6	3·6	3·6	4·0	3 13	0·3	7 45	7·4	2†
4·1	3·9	3·8	3·8	3·7	3·6	3·6	3·8	3·9	3·9	2 41	0·0	7 19	7·6	3†
3·8	3·6	3·5	3·5	3·5	3·2	3·1	3·1	3·5	3·8	3 9	1·7	7 37	6·9	4
5·4	4·9	4·2	3·7	3·1	2·7	2·8	2·9	2·9	4·1	2 57	0·3	8 13	7·9	5
3·8	3·8	3·6	3·4	3·3	3·3	3·3	3·4	3·5	3·6	2 49	0·1	9 5	7·7	6
3·7	3·7	3·7	3·6	3·6	3·4	3·3	3·3	3·5	3·3	3 17	0·6E	8 21	6·8	7
3·6	3·6	3·3	3·1	3·1	3·2	3·3	3·4	3·4	3·2	2 59	0·8E	8 5	6·3	8
3·8	3·9	3·8	3·6	3·7	3·7	3·7	3·7	3·7	3·2	3 9	0·3E	7 9	5·1	9
4·0	3·8	3·9	3·9	3·2	3·1	2·8	2·1	1·2	3·9	2 5	2·4	6 31	7·2	10
2·9	1·8	2·3	2·8	2·4	1·8	1·9	1·7	1·5	3·1	2 29	0·9E	7 43	7·5	11
3·7	3·6	3·3	2·8	2·9	3·1	3·1	3·2	3·0	3·7	1 43	0·5	8 9	8·5	12
3·7	3·6	3·3	2·7	3·1	3·1	3·0	3·0	3·1	3·1	3 13	0·6E	9 13	6·2	13
3·7	3·4	3·4	3·4	3·3	3·2	3·0	3·1	3·7	3·2	1 49	0·6	7 5	6·8	14
4·1	4·3	3·6	3·6	3·6	3·6	3·4	3·6	3·8	3·6	2 49	0·4	7 39	6·8	15
4·6	4·1	4·7	3·7	3·9	3·4	3·2	3·0	3·2	3·9	2 21	1·0	6 49	7·6	16
3·9	4·3	4·0	3·7	3·6	3·5	3·6	3·6	3·6	3·7	2 17	0·1	7 25	6·6	17
2·9	3·3	3·6	3·3	3·9	2·9	3·1	3·3	3·4	3·3	3 29	0·8	7 27	6·7	18
4·0	3·5	3·5	3·5	3·6	3·2	3·6	3·5	3·5	3·7	2 21	1·8	7 37	6·1	19
3·8	4·1	4·2	3·6	3·5	3·5	3·5	3·5	3·5	3·4	3 1	0·3	8 13	5·7	20
4·2	4·6	4·4	4·3	4·1	3·9	3·8	3·8	3·8	3·7	2 53	0·1	8 19	5·7	21
3·7	3·7	4·0	4·1	4·1	3·9	3·8	3·6	3·7	3·8	3 26	1·2	7 39	6·2	22†
3·6	3·6	3·7	3·7	3·8	3·8	3·8	3·8	3·8	4·1	2 49	0·9	8 41	5·2	23
4·4	4·4	4·2	4·2	3·7	3·8	3·7	3·6	3·4	4·1	3 29	1·3	8 21	7·0	24
4·1	4·4	4·2	4·0	3·9	3·9	3·7	3·9	3·7	3·6	3 5	0·8	8 9	6·0	25
3·9	3·8	3·8	3·8	3·7	3·9	3·8	3·6	3·6	3·5	3 25	1·1	8 9	5·9	26†
4·9	5·1	3·3	3·3	2·1	1·8	1·9	2·5	1·7	4·0	2 45	1·2	7 25	8·3	27
1·3	1·7	2·6	3·1	3·3	2·1	1·3	1·5	2·8	1·7	3 17	2·9E	7 53	4·2	28
3·0	3·5	3·2	2·9	3·0	3·2	3·3	3·3	3·1	2·8	2 27	2·0E	8 9	5·8	29
4·1	4·1	3·6	3·3	3·1	3·2	2·8	2·7	2·8	3·4	2 21	0·6E	8 5	7·1	30
4·5	4·4	4·2	4·1	3·4	3·3	3·0	2·8	2·4	3·7	2 17	0·1E	9 9	6·9	31
3·9	3·8	3·7	3·5	3·4	3·3	3·2	3·2	3·2	3·8					Mean
4·2	3·9	3·9	3·9	3·8	3·8	3·6	3·7	3·7	3·9					Mean†

JUNE.

4·5	4·5	4·2	3·6	3·2	2·2	2·1	2·1	2·1	3·5	2 35	0·7	8 57	6·5	1
4·3	4·3	4·0	3·3	3·3	3·3	3·4	3·3	3·3	4·2	1 26	0·3	8 21	7·5	2
3·9	3·1	3·4	3·0	3·1	3·1	3·2	3·3	3·5	3·4	2 49	0 3	9 21	6·5	3
3·5	3·5	3·4	3·3	3·4	3·4	3·2	3·2	3·4	3·3	2 25	0·1E	8 17	5·7	4
4·6	4·3	3·9	3·7	3·2	2·7	2·7	3·0	3·2	3·7	2 9	0·9	7 29	6·3	5
4·5	4·2	4·0	3·5	3·3	3·2	3·2	3·2	3·3	4·0	2 3	1·1	8 43	7·6	6
3·3	3·3	2·6	2·7	2·7	2·6	2·7	2·7	2·7	3·4	2 29	0·8	7 21	6·5	7
4·0	4·2	4·2	4·0	3·7	3·4	3·3	3·2	3·2	3·7	2 5	0·5	8 17	7·3	8
4·2	4·0	3·9	3·5	3·4	3·2	3·2	3·3	3·3	3·4	2 5	0·1	10 17	5·2	9
4·2	4·2	4·1	4·0	3·9	3·5	3·6	3·7	3·7	3·9	3 1	0·9	10 9	6·3	10†
4·6	4·5	4·2	3·9	3·6	3·5	3·5	3·5	3·5	3·9	3 55	1·6	8 17	6·4	11†
5·1	5·1	4·5	4·3	4·2	4·0	3·6	3·2	3·3	3·7	3 13	0·8	7 57	5·2	12
4·3	4·5	4·3	4·2	3·6	4·0	3·4	3·5	3·1	4·0	1 57	1·4	6 45	6·9	13
4·3	4·6	4·9	4·3	4·1	4·0	3·9	3·8	3·7	3·9	2 49	0·8	8 1	6·7	14
4·6	4·6	4·4	4·3	3·8	3·7	3·6	3·5	3·5	4·3	2 9	3·0	7 45	6·1	15
4·6	4·5	4·3	4·3	4·1	4·0	3·9	3·7	3·6	3·8	3 1	1·2	7 53	5·6	16†
3·4	4·0	4·0	3·7	3·7	3·7	3·7	3·7	3·8	3·9	3 21	1·6	8 21	6·5	17†
4·2	4·2	4·2	4·3	3·9	3·8	3·9	3·6	3·9	4·3	2 23	1·2	7 25	7·2	18
4·4	4·4	4·1	3·9	4·1	3·8	3·7	3·7	3·5	4·1	3 41	1·1	7 9	6·2	19
5·1	5·2	5·0	4·5	4·2	4·0	3·8	3·6	4·0	4·7	2 45	0·9	8 13	7·8	20
4·3	4·3	4·3	4·1	4·2	4·0	3·6	3·4	3·4	3·7	1 57	1·1	8 9	5·9	21
4·4	4·9	4·4	4·2	4·0	3·6	3·5	3·1	3·0	4·2	3 5	2·3	8 9	7·6	22
3·9	4·2	4·2	4·1	3·7	3·4	3·3	2·7	2·6	3·8	3 15	0·9	7 41	7·3	23
4·0	4·3	4·3	4·2	4·0	4·0	3·9	3·7	3·4	3·7	3 7	0·2	9 15	6·2	24
4·5	4·6	4·5	4·1	3·7	3·4	3·3	3·1	3·1	4·1	4 21	2·0	8 17	6·7	25
4·5	4·3	4·2	4·1	3·9	3·8	3·7	3·6	3·5	3·6	2 21	0·2	9 13	6·3	26
4·5	4·4	4·4	3·9	3·8	3·8	3·3	3·3	3·1	4·2	1 49	1·4	7 29	7·9	27†
4·1	4·3	4·3	4·1	3·8	3·3	3·3	3·3	3·9	3·8	2 29	0·8	8 29	7·6	28
4·7	4·4	4·3	4·3	4·1	3·7	3·5	3·8	3·6	3·8	3 21	0·9E	8 9	6·1	29
4·9	4·6	4·3	4·1	4·0	3·9	3·9	3·8	3·8	3·6	3 29	0·8	10 17	5·4	30
4·3	4·3	4·1	3·9	3·7	3·5	3·4	3·4	3·4	3·9					Mean
4·2	4·3	4·2	4·0	3·8	3·6	3·6	3·6	3·5	3·9					Mean†

*See footnote on page 89.

†Five international quiet days.

‡All the figures in this table indicate *westerly* declination except those followed by 'E', which represent *easterly* declination.

(Averages for periods of sixty minutes centered at the full hours of Greenwich mean time.)

JULY. 0° PLUS TABULAR QUANTITIES

Date.	Hours (G. M. T.).														
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	3·3	2·5	1·8	1·8	2·1	3·0	4·4	5·9	6·8	7·0	6·5	5·5	5·1	4·6	4·5
2	3·3	2·9	1·2	1·4	1·6	2·1	3·2	4·8	5·8	6·7	6·4	5·2	4·4	3·8	3·5
3	2·3	2·7	2·0	2·0	1·9	2·5	3·6	4·6	5·6	6·8	6·9	6·6	4·7	3·9	3·8
4	2·9	2·2	1·4	1·3	1·6	2·8	4·2	5·4	6·5	6·4	6·1	5·9	5·1	4·6	4·5
5	2·6	2·0	0·8	0·1	0·8	3·0	5·6	6·6	7·2	6·0	4·8	4·4	4·2	4·0	4·2
6	3·0	1·9	0·9	0·7	1·6	2·9	4·4	6·1	7·4	6·9	5·9	4·5	3·8	2·9	3·5
7	3·1	1·8	0·3	0·4	2·6	3·6	4·9	6·0	6·6	6·6	6·3	5·7	5·1	3·9	3·7
8	2·6	1·1E	4·3E	3·9E	8·2E	5·1E	4·4E	2·1E	0·1E	2·2	4·4	0·5	0·1E	0·3	1·3
9	2·3	1·3	0·2	0·2	0·6	1·1	2·8	3·5	3·4	3·7	3·3	3·0	2·8	2·2	1·6
10	2·6	1·9	0·7	0·7	1·3	2·0	3·3	4·9	4·1	5·1	5·1	5·1	5·6	4·3	3·7
11	2·8	2·2	1·3	0·9	1·0	2·0	3·6	4·3	4·2	3·9	3·5	3·4	4·1	4·0	3·6
12	2·6	2·5	1·5	1·3	1·8	2·0	4·5	5·4	5·4	5·8	5·3	4·5	3·7	3·3	3·2
13†	2·9	1·8	0·8	0·2	0·8	2·0	3·5	5·1	5·5	6·0	3·9	2·9	2·5	2·6	3·2
14	3·2	2·7	2·0	2·0	2·7	4·3	5·5	5·5	4·8	4·8	4·0	3·5	2·6	2·4	3·2
15†	2·9	2·0	0·8	0·7	1·9	3·4	4·5	4·7	4·0	3·5	3·6	2·9	2·8	2·9	3·7
16†	2·8	1·7	0·7	0·9	2·6	3·9	4·3	4·4	4·7	5·1	5·3	5·1	4·0	4·0	4·0
17†	3·0	2·3	1·4	0·9	0·9	1·5	3·0	4·0	4·3	4·2	4·0	3·7	3·3	3·2	3·4
18	2·7	0·9	0·1	2·1	4·1	5·6	5·9	6·1	5·4	5·0	4·8	4·2	3·8	3·3	3·2
19	2·7	1·4	0·3	0·2	0·7	2·2	4·2	5·4	5·6	5·1	4·5	3·4	2·9	2·7	3·6
20†	3·1	2·2	1·3	1·0	1·4	2·4	3·0	5·0	5·8	5·7	5·7	4·9	4·2	4·0	4·2
21	2·7	2·0	0·9	0·6	0·1	1·3	2·4	3·9	4·5	4·9	5·5	5·9	5·9	5·4	5·0
22	3·6	3·0	2·4	2·0	2·2	2·7	3·1	4·0	5·0	5·1	4·8	4·5	4·1	4·0	3·8
23	3·9	1·8	2·3	2·6	3·0	4·0	5·0	6·3	6·3	6·9	4·6	3·7	3·8	3·8	3·8
24	2·5	2·6	2·3	3·1	3·7	3·8	4·1	4·2	3·9	3·8	3·1	3·3	3·3	3·3	2·9
25	2·1	1·9	1·2	1·3	1·9	2·1	3·0	3·5	4·3	5·1	5·2	4·6	4·3	4·1	4·0
26	2·7	2·0	1·7	2·5	3·3	4·3§	5·0§	5·9§	5·8§	4·0§	3·0§	3·0	3·3	3·6	3·8
27	3·0	1·7	0·4	0·1	1·0	2·8	4·0	4·3	6·2	5·8	4·4	3·4	3·1	3·9	4·7
28	3·1	2·0	0·6	0·6	1·7	3·0	4·2	6·1	6·5	6·3	5·8	4·7	4·9	3·8	4·3
29	3·4	2·4	0·9	0·9	1·3	3·0	4·1	5·3	5·5	4·3	3·4	3·0	3·0	3·1	3·3
30	2·8	1·5	0·4	0·6	1·7	3·5	4·8	5·9	5·3	4·6	4·2	4·3	4·8	4·6	4·6
31	3·0	2·0	0·9	0·9	1·8	3·8	5·9	8·1	7·8	6·4	5·6	4·8	4·1	3·6	3·6
Mean .	2·9	1·9	0·9	0·9	1·4	2·6	3·8	4·9	5·3	5·2	4·9	4·2	3·9	3·5	3·7
Mean† .	2·9	2·0	1·0	0·7	1·5	2·6	3·7	4·6	4·9	4·7	4·5	3·9	3·5	3·3	3·7

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1	2·1	0·9	0·1E	0·3E	1·0	2·8	4·1	4·9	5·5	5·9	5·9	5·4	4·8	4·2	4·3
2	2·6	2·2	1·2	0·8	1·5	3·0	4·3	6·0	6·6	6·2	5·2	4·4	3·5	3·0	3·6
3	2·7	1·8	0·7	0·7	2·0	4·0	5·2	6·5	6·8	5·8	5·0	4·6	4·5	4·6	4·7
4	3·2	2·6	1·8	1·8	2·6	3·5	4·4	5·4	5·8	4·9	4·5	4·0	3·5	3·5	3·8
5	3·3	3·2	2·9	2·3	2·7	3·0	3·5	4·7	4·7	5·2	5·4	4·6	4·6	3·9	3·2
6	1·8	1·7	1·4	2·0	2·9	3·3	4·4	5·0	6·9	7·1	5·9	3·9	2·9	2·5	3·2
7	4·2	4·1	3·3	3·2	3·3	4·8	5·3	5·3	4·8	4·5	3·9	2·6	2·9	3·3	3·7
8	3·1	2·5	1·6	1·2	1·4	1·7	2·5	3·5	4·8	5·1	5·1	4·0	3·0	2·7	3·3
9	2·1	2·3	1·4	1·3	2·7	4·1	5·4	6·5	6·9	5·9	5·0	4·3	3·9	3·9	3·5
10†	3·3	2·6	1·9	2·0	2·9	4·0	4·2	4·4	4·4	4·5	4·6	4·0	3·4	2·7	3·5
11	3·6	3·1	2·6	2·8	3·3	4·1	4·8	4·5	4·3	4·1	4·0	3·8	3·8	3·4	3·9
12	3·3	2·8	2·2	2·1	2·8	3·7	5·1	5·6	5·6	5·6	4·4	3·4	2·8	3·1	3·6
13	3·3	2·0	1·4	1·7	2·9	5·1	6·1	5·8	5·2	4·5	3·9	3·6	3·4	3·5	4·1
14†	3·6	2·4	1·3	1·7	3·0	4·8	5·9	6·4	6·9	6·1	5·0	3·9	3·1	2·5	2·9
15†	3·4	2·3	0·7	0·3	1·0	3·0	4·5	5·5	6·3	6·0	4·8	3·5	2·4	2·8	3·7
16	3·5	2·4	1·1	1·3	2·5	3·7	4·7	5·5	6·2	6·7	6·3	5·6	4·3	3·6	3·5
17	2·3	2·6	1·6	0·9	1·3	3·0	4·0	5·5	6·4	6·6	6·3	5·1	4·3	3·9	4·0
18	3·7	2·6	0·9	0·1	0·8	3·3	5·7	6·9	6·9	7·0	6·6	5·5	4·6	3·7	4·3
19	3·3	2·5	1·1	0·7	1·8	3·9	5·4	6·7	7·6	7·7	6·7	5·7	4·5	3·6	4·3
20†	4·0	3·2	2·1	2·1	3·0	4·6	5·9	6·7	6·8	6·0	5·3	4·9	4·6	4·3	4·2
21	3·7	3·0	1·5	1·2	2·5	4·0	5·3	6·1	6·8	6·2	5·1	4·1	4·0	4·0	4·4
22†	4·0	3·4	2·2	1·7	2·1	3·4	5·6	7·4	8·1	8·0	6·4	4·9	3·9	3·5	4·0
23	3·6	3·0	2·1	1·8	2·9	4·9	5·8	6·2	7·9	6·9	6·4	5·7	5·3	4·9	4·7
24	4·5	4·0	2·7	2·0	2·3	3·6	4·9	5·9	6·8	6·7	5·2	4·2	3·8	3·9	4·0
25	3·5	2·6	1·2	0·8	0·9	3·0	5·2	7·3	7·3	6·0	4·3	3·4	3·2	3·5	4·1
26	4·1	3·7	3·0	3·0	4·0	5·0	6·0	6·2	6·8	5·3	4·5	4·0	3·6	3·9	4·1
27 ♣	3·5	2·9	1·2	0·8	2·0	3·4	4·8	5·3	6·6	5·9	5·8	5·1	4·2	3·8	3·9
28	2·8	2·0	0·5	0·3	2·0	4·1	5·6	6·7	7·3	6·3	5·3	4·7	4·5	4·0	4·1
29	2·9	1·9	0·9	1·3	2·8	4·4	5·5	6·6	7·0	5·8	4·3	3·6	3·9	4·2	4·4
30	2·1	2·0	1·5	1·9	2·7	3·8	4·8	5·9	6·1	4·8	3·7	3·2	2·9	3·3	3·9
31	2·9	2·2	1·3	1·1	2·8	5·1	5·9	6·3	7·1	6·2	4·6	3·6	3·5	4·1	4·3
Mean .	3·3	2·6	1.6	1·4	2·3	3·8	5·1	5·9	6·4	6·0	5·2	4·3	3·8	3·6	3·9
Mean† .	3·7	2·8	1·7	1·6	2·4	3·9	5·2	6·1	6·5	6·1	5.2	4·2	3·5	3·3	3·8

† Five international quiet days.

‡All the figures in this table indicate *Westerly* declination, except those followed by 'E' which represent *easterly* declination.

§Driving clock under cleaning. Eye-readings at full hours substituted. The day has been omitted for means.

(Averages for periods of sixty minutes centered at the full hours of Greenwich mean time.)

JULY. 0° PLUS TABULAR QUANTITIES.

Hours (G. M. T.).									Mean.*	Maximum.			Minimum.			Date.
15	16	17	18	19	20	21	22	23		Time.		Mag.	Time.		Mag.	
′	′	′	′	′	′	′	′	′	′	H.	M.	′	H.	M.	′	
4·6	4·5	4·1	4·0	3·7	3·5	3·4	3·3	3·5	4·1	2	21	1·5	8	53	7·1	1
4·8	5·1	4·6	4·1	4·0	3·8	3·6	3·2	3·2	3·8	2	23	1·1	8	37	7·4	2
4·3	3·6	3·6	3·9	3·1	3·0	3·1	3·2	2·8	3·6	1	17	1·2	9	17	6·2	3
5·0	4·1	4·1	4·0	3·6	3·4	3·3	3·3	2·8	3·9	2	17	1·0	8	13	7·2	4
4·2	4·2	4·2	4·1	3·9	3·6	3·5	3·3	3·1	3·8	2	49	0·0	7	37	7·3	5
4·7	4·4	4·1	4·0	3·7	3·2	3·0	3·1	3·1	3·7	3	9	0·8	7	57	7·6	6
4·4	4·4	·2	3·8	3·7	3·5	3·2	2·9	2·7	3·9	2	27	1·1E	23	45	8·2	7
2·3	4·1	2·9	3·1	3·0	2·9	·2·7	2·5	2·4	0·3	1	25	11·6E	0	17	6·1	8
2·0	2·2	3·0	3·1	3·2	3·2	3·0	3·0	2·7	2·4	2	17	0 4E	8	45	4·2	9
3·8	3·7	3·7	3·3	3·5	3·2	2·9	2·9	2·9	3·4	2	13	0·1	1	29	5·7	10
3·7	3·6	3·6	3·5	3·5	3·4	3·2	3·1	3·1	3·1	3	25	0·7	7	17	4·7	11
3·1	3·0	3·3	3·6	3·8	3·5	3·5	3·6	3·3	3·5	2	29	1·1	8	49	5·9	12
3·6	3·6	3·6	3·5	3·5	3·4	3·3	3·3	3·2	3·1	3	25	0·1	8	1	6·8	13†
3·9	3·9	3·6	3·2	3·2	3·2	3·3	3·3	3·3	3·5	3	1	1·7	6	25	5·9	14
3·9	3·9	3·7	3·7	3·6	3·6	3·5	3·6	3·4	3·2	2	32	0·4	6	13	4·9	15†
4·1	4·1	4·0	3·9	3·9	3·7	3·6	3·2	3·1	3·7	2	37	0·5	10	0	5·5	16†
4·0	4·2	4·0	3·9	4·0	3·8	3·3	3·2	3·1	3·2	3	29	0·6	8	21	4·5	17†
4·0	4·1	4·0	3·9	3·8	3·5	3·3	3·7	3·1	3·8	1	49	0·2E	6	29	6·3	18
3·7	3·6	3·7	3·7	3·6	3·4	3·2	3·3	3·1	3·2	2	29	0·1	7	37	6·9	19
4·4	4·2	4·1	3·8	3·3	3·2	2·9	2·8	2·5	3·5	3	5	0·9	7	39	6·1	20†
4·9	4·8	4·4	3·8	3·6	3·3	3·3	3·4	3·5	3·6	3	·53	0·3E	10	37	6·1	21
3·8	3·5	3·3	3·1	3·0	2·7	2·0	1·9	2·0	3·3	2	49	1·4	8	23	6·4	22
4·3	4·1	3·8	3·6	3·3	3·0	2·8	2·5	2·6	3·7	0	57	1·6	7	17	6·9	23
4·1	3·8	3·2	3·1	2·8	2·3	2·2	2·2	2·6	3·2	2	41	2·2	6	29	4·5	24
4·3	4·2	3·7	3.4	3·0	2·5	2·5	2·5	2·6	3·3	2	39	1·1	9	17	6·3	25
3·9	4·0	4·0	3·8	3·3	3·1	3·1	3·2	3·1	¼	1	37	1·5	16	17	4·2	26
5·0	4·9	4·3	4·2	4·0	3·8	3·8	3·5	3·5	3·6	2	39	0·6	8	9	5·4	27
3·6	3·8	3·7	3·5	3·6	3·8	3·3	3·3	3·6	3·7	2	29	0·3	7	25	6·8	28
3·7	4·0	4·0	3·9	3·7	3·4	3·2	3·2	3·1	3·3	2	27	0·7	7	41	5 9	29
4·5	4·2	4·3	4·1	4·0	3·6	3·3	3·2	3·1	3·7	2	5	0·3	7	9	6·0	30
3·8	4·1	3·6	3.3	3·1	3·0	2·4	2·4	2·4	3·7	2	27	0·6	7	17	8·4	31
4·0	4·0	3·8	3·7	3·5	3·3	3·1	3·1	3·0	3·4							Mean.
4·0	4·0	3·9	3·8	3·7	3·5	3·3	3·2	3·1	3·3							Mean.†

AUGUST.

4·5	4·2	4·1	3·8	3·3	3·1	3·0	3·0	3·0	3·5	2	29	0.4E	8	53	6·6	1
4·3	4·2	3·8	3·6	3·4	3·0	3·0	3·1	3·0	3·6	2	49	0·7	8	17	6·8	2
4·7	4·3	4·1	3·9	3·7	3·4	3·3	3·3	3·2	3·9	2	40	0·2	7	45	7·0	3
4·3	4·2	4·1	4·2	4·0	3·4	3·1	3·0	3·1	3·7	2	17	1·3	7	53	6·9	4
3·8	3·7	3·0	3·0	2·8	2·1	1·9	1·9	2·0	3·4	3	5	1·9	10	37	5·8	5
3·7	3·7	3·9	4·1	3·9	3·5	3·7	3·6	3·9	3·8	1	29	1·2	8	39	7·3	6
3·8	3·7	3·9	3·9	3·8	3·8	3·5	3·7	3·6	3·9	2	33	3·0	5	45	6·6	7
3·6	3·5	3·6	3·5	3·6	3·5	3·5	3·5	3·3	3·2	2	41	1·0	9	33	6·2	8
3·9	3·9	3·9	4·0	4·1	4·1	4·0	4·0	3·9	4·0	2	37	1.0	7	45	7·1	9
3·7	4·0	4·2	4·3	3·2	3·8	3·7	3·7	3·7	3·7	1	54	1·5	9	45	4·7	10†
4·1	4·1	4·1	4·0	4·0	3·7	3·5	3·3	3·2	3·7	2	21	2·3	6	1	5·1	11
3·8	3·8	3·3	3·4	3·8	3·7	3·9	3·3	3·2	3·7	2	24	2·0	6	49	5·7	12
4·1	4·2	4·2	4·2	4·2	4·1	4·1	3·9	3·9	3·9	2	39	1·3	6	5	6·4	13
3·9	3·9	3·9	3·9	4·0	3·9	3·8	3·7	3·6	4·0	2	9	1·1	7	57	7·1	14†
4·2	4·3	4·2	4·2	4·2	4·2	4·2	4·1	4·0	3·7	2	49	0·3E	8	9	6·6	15†
3·8	3·9	4·2	4·2	4·2	4·1	4·1	3·8	3·6	4·0	2	37	1·0	7	16	6·9	16
4·3	4·3	4·2	4·1	4·0	4·0	4·0	4·0	3·9	4·0	3	5	0·8	9	29	7·4	17
4·3	4·2	3·9	3·7	3·6	3·6	3·6	3·6	3·6	4·0	3	9	0·0	9	13	7·2	18
4·5	4·6	4·3	4·1	4·1	3·9	3·8	3·8	4·0	4·3	2	49	0·5	8	29	8·0	19
4·1	4·0	3·8	3·8	3·8	3·8	3·8	3·7	3·7	4·2	2	37	1·4	7	29	7·0	20†
4·5	4·3	4·1	3·8	3·7	3·7	3·8	3·9	4·1	4·6	2	37	0·8	8	1	8·9	21
4·4	4·4	4·3	4·1	4·0	3·9	3·8	3·7	3·6	4·3	3	1	1·5	7	53	8·2	22†
4·8	4·6	4·4	4·5	4·4	4·4	4·4	4·5	4·6	4·7	2	49	1·5	8	21	7·1	23
4·4	4·3	4·0	4·1	3·9	3·9	3·9	3·9	3·9	4·2	2	49	1·9	8	17	7·1	24
4·4	4·6	4·6	4·6	4·4	4·4	4·4	4·3	4·3	4·6	3	37	0·5	7	17	7·7	25
5·1	4·8	4·5	4·3	4·0	3·7	3·7	2·9	3·0	4·2	2	29	2·6	7	53	7·2	26
4·3	4·3	4·0	3·7	3·3	2·9	2·8	2·8	2·8	3·7	2	13	0·6	8	13	7·4	27
4·0	4·0	3·9	3·9	3·4	3·0	3·0	3·0	3·0	3·8	2	29	0·9	7	49	7·4	28
4·6	4·5	4·2	4·0	3·7	3·6	3·5	3·4	3·3	3·9	2	5	0·6	7	33	7·1	29
4·0	4·0	4·0	3·9	3·6	3·1	3·0	3·9	2·8	3·5	2	9	1·4	7	29	6·4	30
4·5	4·6	4·5	4·1	3·7	3·6	3·6	3·4	3·3	4·0	2	41	0·9	7	49	7·4	31
4·2	4·2	4·0	4·0	3·8	3·6	3·6	3·5	3·5	3·9							Mean.
4·1	4·1	4·1	4·1	4·0	3·9	3·9	3·8	3·7	4·0							Mean.†

*See footnote on page 89.

†Five international quiet days.

‡All the figures in this table indicate *westerly* declination except those followed by 'E' which represent *easterly* declination.

§Driving clock under cleaning. Eye-readings at full hours substituted. The day has been omitted for means.

(Averages for periods of sixty minutes centered at the full hours of Greenwich mean time.)

SEPTEMBER. 0° PLUS TABULAR QUANTITIES.

Date.	Hours. (G. M. T.)														
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	3·2	2·5	1·4	0·9	1·4	3·0	4·0	4·8	6·3	6·3	5·1	3·6	3·1	3·2	3·9
2	3·0	2·4	1·2	0·7	1·3	3·8	5·4	7·1	8·0	7·7	6·7	5·2	3·7	3·4	3·9
3	3·4	2·3	0·8	0·2	0·7	1·3	3·7	5·4	6·1	5·8	4·7	3·0	3·5	3·1	2·3
4	2·5	2·6	1·9	1·8	2·5	4·5	6·1	7·5	7·5	7·1	6·1	5·0	4·1	4·1	4·1
5	3·9	3·3	1·6	0·9	2·3	4·5	6·2	7·1	7·3	6·7	5·4	3·9	3·2	3·2	3·4
6	2·9	2·8	1·5	1·1	1·5	3·2	4·9	6·2	6·8	6·2	5·4	4·3	3·5	3·3	4·0
7	3·7	2·7	1·1	0·5	1·1	2·5	3·8	5·4	6·5	6·6	5·6	4·4	4·2	3·8	2·3
8	2·5	1·1	0·1E	0·3	0·5	2·5	4·0	6·2	7·3	7·9	6·9	5·8	4·4	3·7	3·6
9	1·5	0·1	1·3E	1·1E	0·9	3·4	5·2	7·0	7·8	7·2	5·6	4·4	3·8	4·2	4·4
10	3·2	2·0	0·1	0·5	2·3	4·4	5·7	6·6	6·6	5·3	3·7	2·6	2·7	3·8	3·9
11	3·3	2·6	1·8	1·8	3·5	5·2	6·0	6·3	6·2	5·8	4·3	3·2	2·6	3·5	3·8
12†	2·3	2·6	1·3	1·2	2·4	4·2	5·4	6·3	6·4	5·9	5·1	4·4	4·5	4·7	4·4
13	3·9	3·6	2·5	2·4	3·4	4·3	5·3	6·2	6·4	5·9	4·9	4·1	4·0	4·5	4·6
14	4·0	3·4	2·4	1·6	1·7	3·3	4·6	5·9	6·5	6·7	5·5	4·8	4·7	4·8	4·7
15	3·6	3·2	2·3	1·9	2·1	2·9	4·5	6·1	6·5	6·3	5·6	4·6	3·9	3·9	4·2
16†	3·8	3·0	1·5	0·8	1·8	4·2	5·8	7·3	7·7	6·8	5·6	4·5	3·9	4·0	4·3
17†	3·9	2·8	1·0	0·0	0·2	2·9	4·9	7·0	7·7	7·0	5·6	4·3	3·7	4·1	4·3
18	3·9	3·2	1·3	0·8	1·7	3·0	4·7	6·5	7·0	6·2	4·8	4·1	4·3	4·9	4·7
19	3·1	3·0	1·8	1·2	2·1	3·9	5·5	6·8	8·2	7·6	6·1	4·2	4·2	2·9	3·5
20	2·5	2·9	1·7	1·4	2·3	4·2	6·0	7·5	8·3	8·4	4·9	3·1	3·4	4·8	4·8
21†	3·9	3·6	2·6	2·4	3·4	4·4	4·9	5·9	6·4	5·6	4·5	4·0	3·9	4·4	4·4
22	4·2	3·5	2·1	1·2	1·8	2·9	4·3	6·1	6·9	6·7	5·7	4·7	4·7	4·9	5·0
23	3·8	3·2	1·7	1·0	1·7	3·3	4·6	6·1	6·6	6·2	5·1	4·4	4·4	4·7	4·9
24	3·8	3·8	3·5	1·4	1·9	3·5	4·8	6·0	6·4	5·6	4·2	3·6	3·8	4·7	4·7
25	3·3	2·9	2·9	2·4	2·7	4·1	4·9	6·6	7·3	6·1	4·5	3·7	3·0	3·6	3·3
26	2·8	2·1	0·3	0·6E	1·1	4·3	5·6	7·0	7·0	5·6	4·3	3·4	3·8	4·8	4·6
27	3·9	3·2	1·8	1·1	2·3	4·3	5·5	6·6	6·8	5·7	5·0	4·3	4·3	4·8	4·6
28†	3·7	3·3	2·0	1·4	2·0	4·5	6·3	6·7	6·8	5·8	4·7	4·2	4·6	4·9	4·8
29	3·8	3·3	2·1	1·2	2·4	4·4	6·6	7·3	7·3	6·6	5·1	4·4	4·4	4·7	4·5
30	4·1	4·1	3·1	2·1	1·7	2·6	4·3	5·7	5·9	5·4	4·6	3·8	3·9	4·2	3·8
Mean .	3·5	2·8	1·5	1·1	2·3	3·7	5·1	6·4	6·9	6·3	5·1	4·1	3·8	3·7	4·1
Mean† .	3·7	3·1	1·7	1·1	2·1	4·0	5·4	6·7	7·0	6·2	5·1	4·3	4·1	4·4	4·5

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1	4·3	4·1	3·2	2·1	2·1	3·6	5·6	7·8	7·7	7·0	5·3	3·8	3·6	4·1	4·2
2	4·3	3·8	2·5	1·3	1·5	3·2	4·7	6·3	6·8	5·2	5·1	3·6	2·6	4·1	4·3
3	4·0	3·0	1·6	0·7	0·7	2·3	5·6	7·2	6·4	5·5	4·1	3·3	3·7	4·4	4·3
4	4·1	3·6	2·0	1·5	2·0	4·0	5·5	6·9	7·1	6·3	4·9	3·9	4·1	4·6	4·5
5	4·6	4·5	3·7	2·9	3·1	4·7	6·3	7·3	7·8	6·3	5·5	4·5	3·5	3·7	3·5
6	4·1	3·4	2·6	2·8	4·1	6·1	7·1	7·0	6·7	5·7	4·7	4·3	4·2	4·7	4·7
7	4·4	4·0	2·5	1·2	1·0	2·8	3·6	5·2	5·4	5·4	4·3	3·2	3·9	4·5	4·6
8	4·6	4·1	2·6	2·3	3·0	4·4	5·7	6·6	6·7	6·2	5·4	4·8	5·0	4·3	4·6
9†	4·3	3·8	2·9	3·4	4·5	5·9	6·3	6·8	6·0	5·2	4·2	3·5	4·2	4·8	4·4
10†	4·6	4·0	3·6	2·7	4·0	5·3	7·1	7·1	6·7	5·5	4·6	3·9	4·6	5·1	4·9
11†	4·6	4·5	3·3	2·7	2·6	4·0	5·2	6·2	5·8	5·3	4·4	4·2	4·8	5·3	4·8
12	3·6	3·9	3·3	3·4	4·5	6·2	7·2	7·8	6·6	4·9	3·8	3·4	4·4	4·9	4·7
13	4·4	4·0	3·3	3·0	4·6	6·3	7·1	6·9	6·7	5·9	4·9	4·0	4·2	4·9	4·6
14	3·6	3·4	3·0	3·2	3·8	5·3	6·3	7·5	6·6	4·8	3·5	3·1	4·0	4·3	4·6
15	4·5	4·1	3·1	2·4	2·6	3·6	5·1	6·3	6·2	5·9	5·4	4·5	4·4	4·9	4·7
16	4·2	4·1	3·8	3·2	3·5	3·9	4·6	4·9	4·8	4·0	3·3	3·1	3·1	4·5	4·2
17	4·6	3·8	3·2	2·9	3·3	4·6	5·6	5·7	5·7	5·2	4·3	3·9	4·6	4·9	4·6
18	4·3	4·0	3·6	2·7	2·9	3·7	5·2	6·1	5·8	4·5	3·9	3·7	4·6	5·1	4·6
19	3·0	3·2	3·6	3·6	3·7	5·0	5·9	6·0	5·4	4·6	4·6	3·8	4·2	4·1	3·6
20	4·1	3·6	2·8	2·4	2·7	4·7	5·7	6·1	5·7	5·3	4·6	4·0	4·1	4·6	4·2
21	4·0	4·7	3·7	3·3	3·8	4·5	5·4	5·9	5·4	5·3	4·8	4·1	4·0	4·4	4·2
22	3·6	3·2	3·4	3·2	4·3	5·2	5·8	4·9	4·1	3·1	2·2	2·6	3·8	4·5	4·5
23†	4·1	3·8	3·1	2·6	2·1	2·8	3·3	3·4	3·1	3·5	3·0	3·1	3·9	3·6	3·9
24	4·1	4·6	3·1	3·1	3·8	5·2	5·4	5·3	4·2	5·1	3·8	4·6	4·3	4·7	4·9
25	5·4	4·3	3·4	4·1	4·3	4·1	5·2	4·5	4·3	4·0	3·7	4·3	4·9	5·1	5·8
26	3·8	4·2	4·3	3·9	3·5	3·6	4·1	4·9	4·1	3·7	3·8	3·7	4·9	4·8	4·7
27	4·8	4·6	4·3	4·5	4·9	5·0	4·9	3·7	3·1	2·7	2·7	3·3	4·0	4·3	3·6
28†	4·5	4·8	4·1	4·0	4·4	5·3	5·3	5·1	4·4	3·8	4·0	4·2	4·9	5·0	4·6
29	4·6	4·9	4·4	3·8	3·5	3·5	4·2	4·5	4·2	3·5	3·4	3·4	4·0	3·5	4·5
30	4·9	4·9	4·3	4·1	3·8	3·8	4·5	4·9	4·8	4·1	3·2	3·9	4·6	5·1	4·9
31	4·4	4·8	4·9	4·8	4·8	5·1	5·2	5·3	5·3	4·9	4·9	4·9	5·2	4·9	5·1
Mean .	4·3	4·1	3·3	2·9	3·3	4·4	5·4	5·9	5·6	4·9	4·2	3·8	4·1	4·5	4·4
Mean† .	4·4	4·1	3·2	3·1	3·5	4·7	5·5	5·7	5·2	4·7	4·0	3·8	4·5	4·7	4·6

† Five international quiet days.

‡ All the figures in this table indicate *westerly* declination except those followed by 'E' which represent *easterly* declination.

(Averages for periods of sixty minutes centered at the full hours of Greenwich mean time.)

SEPTEMBER. 0° PLUS TABULAR QUANTITIES.

Hours (G. M. T.)									Mean.*	Maximum.		Minimum.		Date.
										Time.	Mag.	Time.	Mag.	
15	16	17	18	19	20	21	22	23		H. M.		H. M.		
′	′	′	′	′	′	′	′	′	′		′		′	
4·1	4·1	4·0	3·7	3·5	3·5	3·5	3·3	3·2	3·6	3 5	0·8	8 29	7·0	1
4·1	4·0	3·7	3·7	3·6	3·6	3·5	3·5	3·5	4·0	2 51	0·6	8 33	8·7	2
3·1	2·1	2·1	2·6	2·7	3·2	3·3	3·6	3·6	3·0	2 49	0·2E	8 21	6·4	3
4·3	4·0	3·9	3·8	3·8	3·5	3·5	3·8	3·9	4·3	2 45	1·4	7 5	7·7	4
3·7	3·6	3·7	3·3	3·3	3·7	4·1	4·1	4·1	4·0	2 49	0·8	7 33	7·6	5
4·0	4·2	4·0	3·9	3·9	4·0	4·1	4·0	3·8	3·9	3 9	0·9	7 49	7·0	6
1·4	1·6	2·1	2·5	2·1	1·9	2·5	3·3	2·8	3·1	2 49	0·4	8 29	6·8	7
2·8	2·8	3·2	·3·3	3·4	3·6	3·1	3·0	2·4	3·6	2 37	0·2E	7 49	8·2	8
4·1	3·7	3·4	3·3	3·3	3·5	3·4	·3·3	3·2	3·6	2 5	1·7E	7 49	7·9	9
4·1	4·5	4·4	4·3	4·0	3·6	3·5	3·4	3·4	3·7	2 9	0·0	7 53	6·9	10
4·3	4·3	3·5	3·4	3·6	3·7	3·7	3·3	3·4	3·9	2 37	1·2	7 57	6·2	11
4·4	4·4	4·2	4·2	4·1	3·6	3·5	3·5	3·5	4·1	2 39	1·0	8 1	6·8	12†
4·5	3·9	3·6	3·7	3·4	3·4	3·3	3·4	3·8	4·1	2 37	2·1	7 49	6·8	13
4·2	4·1	4·2	4·1	3·9	3·8	3·7	3·7	3·8	4·2	3 25	1·4	8 55	7·0	14
4·0	3·9	3·6	3·5	3·4	3·5	3·5	3·8	4·0	3·9	3 1	1·8	8 5	6·6	15
4·3	4·3	4·3	4·4	4·2	4·1	4·1	4·2	4·2	4·3	2 49	0·7	7 29	8·5	16†
4·5	4·4	4·3	4·3	4·1	4·0	4·0	4·0	4·1	4·1	2 49	0·2E	7 49	8·3	17†
4·7	4·9	4·8	4·6	4·6	3·9	3·8	3·9	2·8	4·0	2 41	0·0	7 39	7·6	18
4·0	3·6	3·3	3·4	3·6	3·8	3·6	3·6	3·6	4·0	2 49	0·7	8 17	9·0	19
4·3	4·3	4·3	4·3	4·0	3·8	3·7	3·7	3·8	3·8	2 51	1·3	7 13	6·4	20
4·5	4·4	4·4	4·3	4·2	4·2	4·3	4·2	4·2	4·3	2 29	1·8	7 49	6·9	21†
4·7	4·6	4·4	4·1	4·1	4·0	3·9	3·8	3·9	3·8	3 23	0·6	7 53	7·2	22
4·2	4·3	4·3	4·1	3·9	3·6	3·5	4·0	3·7	4·0	2 49	0·6	8 11	7·1	23
4·7	4·5	4·7	4·4	4·2	4·2	4·0	4·4	4·0	4·1	3 9	0·9	7 37	6·9	24
3·5	3·0	3·6	3·5	3·3	3·3	3·5	4·1	3·0	3·8	2 45	1·8	7 53	8·1	25
4·4	4·4	4·2	4·1	4·0	3·9	3·9	4·0	4·1	3·9	2 49	1·2E	7 11	7·9	26
4·3	4·3	4·2	4·2	3·9	3·7	3·6	3·6	3·9	4·1	2 49	0·9	7 45	7·8	27
4·7	4·7	4·5	4·2	4·1	4·1	4·0	4·0	3·9	4·3	3 9	0·9	7 29	7·1	28†
4·4	4·5	4·4	4·2	4·0	3·9	3·9	3·9	4·0	4·2	2 37	1·1	6 27	7·4	29
4·1	4·6	4·6	4·6	4·2	4·2	4·2	4·2	4·2	4·1	4 25	0·9	7 31	6·4	30
4·1	4·0	3·9	3·9	3·7	3·7	3·7	3·7	3·7	4·0					Mean.
4·5	4·4	4·3	4·3	4·1	4·0	4·0	4·0	4·0	4·2					Mean†

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4·0	3·9	4·1	4·3	4·1	4·2	4·1	4·2	4·2	4·4	3 29	1·8	8 9	8·5	1
4·4	4·3	3·6	3·3	3·9	4·2	3·8	3·7	3·9	3·9	3 33	1·4	7 41	7·5	2
3·9	3·5	3·8	3·9	3·9	3·8	3·9	4·1	4·2	3·8	3 29	0·6	7 9	8·0	3
4·6	4·5	4·6	4·1	4·2	4·3	4·3	4·4	4·5	4·4	3 9	1·4	7 49	7·4	4
3·1	3·2	3·2	2·9	3·1	3·6	3·8	3·8	3·9	4·2	3 29	2·8	7 18	7·9	5
4·8	3·9	3·6	3·2	3·6	3·8	4·0	4·3	4·1	4·5	2 25	2·4	6 19	7·7	6
4·2	4·0	3·8	3·5	3·6	3·3	3·7	4·2	4·4	3·7	3 49	0·1E	7 9	8·7	7
4·5	4·5	4·2	4·0	4·0	4·1	4·1	4·4	4·5	4·5	3 9	2·2	7 9	6·8	8
4·3	4·3	4·2	4·2	4·2	4·2	4·3	4·3	4·3	4·5	2 29	2·8	7 9	6·7	9†
4·7	4·7	4·6	4·4	4·2	4·1	4·6	4·6	4·7	4·7	2 29	2·4	6 7	7·9	10†
4·4	4·4	4·4	4·2	3·9	3·7	3·8	3·8	3·7	4·3	2 49	2·1	7 9	6·6	11†
4·7	4·7	4·6	4·4	4·1	4·1	4·0	4·1	4·3	4·7	2 33	3·2	7 9	8·0	12
4·0	3·8	3·7	3·4	3·4	3·5	3·5	3·8	3·6	4·5	2 49	2·9	6 49	8·2	13
4·1	4·0	4·2	4·3	4·1	4·0	3·9	4·0	4·3	4·4	2 9	2·9	7 9	7·9	14
4·5	4·5	4·4	4·2	4·0	3·8	4·1	4·1	4·2	4·4	3 9	1·6	7 29	6·7	15
3·9	4·0	4·5	4·2	4·2	4·1	4·0	3·9	4·0	4·0	3 29	3·1	7 9	6·0	16
4·4	4·3	4·3	4·3	4·0	3·4	3·5	4·1	4·2	4·3	2 29	2·8	7 9	6·8	17
2·0	2·7	1·5	0·9	2·2	2·8	3·0	3·2	3·2	3·2	17 49	0·3	7 45	7·9	18
4·2	4·0	3·8	3·6	3·7	3·4	3·6	3·6	4·1	4·1	3 9	3·1	8 49	6·6	19
4·2	4·2	4·3	3·8	3·8	3·8	3·8	4·0	3·9	4·2	3 9	2·3	6 49	6·4	20
4·1	4·2	4·1	3·8	3·6	3·9	3·5	3·3	3·5	4·2	2 49	3·0	6 49	6·3	21
4·2	4·2	4·2	3·6	3·7	3·5	3·6	3·5	3·5	3·7	10 29	2·6	6 9	5·9	22
4·0	5·3	4·4	4·1	4·1	3·8	3·9	4·6	4·3	3·7	6 9	2·0	12 49	4·6	23†
4·9	4·7	4·3	4·2	4·1	3·7	4·0	4·3	5·4	4·4	3 29	3·0	7 9	5·9	24
3·8	3·7	3·4	3·3	2·8	2·2	2·0	2·7	4·1	3·9	21 49	1·8	5 37	5·7	25
4·3	4·1	4·1	4·0	3·9	4·0	4·9	4·8	4·9	4·2	3 37	3·3	7 9	5·4	26
3·8	3·8	3·8	3·6	3·6	4·1	4·2	4·9	4·3	4·0	10 9	2·6	5 21	5·7	27
4·7	4·7	4·4	4·1	4·1	4·3	4·3	4·3	4·5	4·5	9 9	3·7	6 9	5·4	28†
4·3	4·3	4·2	4·2	4·1	4·1	4·0	4·1	4·4	4·1	11 9	3·3	6 29	4·9	29
4·6	4·6	4·6	4·0	4·3	4·2	4·1	4·3	4·3	4·4	10 9	3·0	7 29	5·4	30
5·6	4·8	4·8	4·7	4·3	4·2	4·1	4·3	4·0	4·8	20 49	3·9	6 29	5·4	31
4·2	4·2	4·1	3·8	3·8	3·8	3·9	4·1	4·2	4·2					Mean.
4·4	4·7	4·4	4·2	4·1	4·1	4·1	4·3	4·3	4·3					Mean.†

* See footnote on page 89.

† Five international quiet days.

‡ All the figures in this table indicate *westerly* declination except those followed by 'E' which represent *easterly* declination.

(Averages for periods of sixty minutes centered at the full hours of Greenwich mean time.)

NOVEMBER. 0° PLUS TABULAR QUANTITIES,

Date.	Hours (G. M. T.)														
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	4·9	5·1	4·7	4·2	4·3	5·3	6·0	5·9	5·0	4·8	4·7	4·6	4·6	4·5	4·3
2	4·9	4·9	4·4	4·1	3·8	4·1	4·4	4·3	3·8	3·4	3·5	3·8	3·8	3·6	2·5
3	5·0	4·6	4·4	3·9	3·8	4·5	5·0	5·1	4·9	4·8	3·8	3·6	3·2	2·8	3·4
4	4·4	4·5	4·5	4·3	4·1	4·0	4·9	4·6	4·4	4·4	4·5	4·9	3·3	3·8	4·3
5	4·4	4·3	4·0	3·4	3·3	3·7	3·9	4·3	4·3	4·4	4·2	4·1	4·3	4·5	4·5
6	4·8	4·7	4·4	3·9	3·8	4·2	5·0	5·4	5·0	4·2	4·0	3·9	4·0	4·3	4·2
7	4·9	4·9	4·8	4·9	5·3	5·3	5·4	5·2	4·4	4·1	4·3	4·6	4·7	4·7	4·7
8†	4·3	3·8	3·8	3·8	4·1	5·0	5·1	5·1	4·9	4·1	3·9	3·9	4·0	4·0	4·9
9†	4·7	4·6	4·0	3·9	4·1	4·9	5·4	5·6	4·9	4·4	4·4	4·7	5·0	5·2	5·0
10	5·7	5·7	5·4	5·0	4·9	4·8	4·9	5·0	4·5	4·1	3·4	3·4	3·2	3·1	3·2
11	4·0	4·2	4·0	3·3	2·7	3·2	4·2	5·1	4·7	3·1	3·7	4·1	4·8	5·0	4·9
12	4·9	4·6	4·1	3·4	2·6	2·8	3·3	4·5	3·9	3·7	4·0	4·1	4·9	4·9	4·7
13	4·6	4·6	4·2	3·5	3·4	3·8	4·3	4·1	3·5	3·2	3·7	4·6	5·0	5·0	4·4
14	4·1	4·2	4·7	4·9	4·7	5·1	5·4	5·2	5·0	4·3	4·3	4·1	4·3	4·3	4·6
15	3·0	3·9	4·3	4·3	4·7	5·2	5·5	4·9	4·5	4·1	4·1	4·4	4·7	3·9	5·1
16	5·6	5·2	5·1	5·1	4·7	4·9	5·2	4·9	4·5	4·6	3·6	3·7	4·1	4·4	4·9
17	4·1	4·7	4·7	5·5	4·1	4·5	5·0	5·3	4·4	3·1	3·8	4·1	4·3	4·4	4·4
18	4·5	4·9	4·8	4·8	4·9	4·9	5·2	4·7	3·9	3·9	4·3	4·5	4·7	4·6	4·7
19	4·7	4·6	4·6	4·2	3·7	4·0	4·7	4·9	5·0	4·7	4·7	4·7	4·6	4·8	4·7
20	5·0	5·1	5·3	4·7	4·2	4·9	5·7	5·8	5·0	3·9	4·0	4·6	5·0	5·0	4·7
21	5·1	5·2	5·2	5·0	5·0	4·7	5·4	6·4	6·2	5·0	5·0	5·4	4·4	5·3	5·0
22†	5·1	5·1	5·1	5·5	5·6	6·3	6·5	6·6	6·3	5·8	5·7	5·6	5·1	5·0	4·7
23	5·3	5·2	5·6	5·5	5·3	5·2	4·4	3·5	3·2	3·7	4·4	4·9	4·9	4·9	5·1
24	5·5	5·0	5·6	5·7	5·6	5·9	5·4	4·7	3·7	3·3	3·9	3·11	3·9	4·2	4·6
25	5·3	5·7	5·7	5·5	5·1	5·2	5·1	4·2	3·1	3·1	4·1	4·6	4·8	4·4	4·1
26	5·7	5·6	5·5	5·2	5·0	5·4	5·6	5·0	4·1	3·7	3·9	4·0	4·2	4·1	3·9
27	5·6	6·1	6·4	6·3	6·4	6·1	6·1	5·5	5·0	4·9	4·9	5·0	4·9	4·7	4·9
28†	5·5	5·7	6·0	5·9	5·4	4·9	4·9	4·7	4·5	3·8	4·1	4·4	4·7	4·7	4·6
29†	5·7	5·9	5·9	5·5	4·9	5·0	4·5	4·3	4·0	3·9	4·0	4·1	4·4	4·9	4·8
30	5·6	5·8	6·0	5·6	5·3	5·4	5·5	5·5	5·5	5·1	4·9	4·7	4·9	5·0	5·1
Mean	4·9	5·0	4·9	4·7	4·5	4·8	5·1	5·0	4·5	4·2	4·2	4·3	4·4	4·5	4·5
Mean†	5·1	5·0	5·0	4·9	4·8	5·2	5·3	5·2	4·9	4·4	4·4	4·5	4·6	4·8	4·8

DECEMBER.

1	5·1	5·2	5·7	5·7	5·1	4·8	4·7	4·7	4·1	3·3	3·4	4·0	4·5	4·9	4·8
2	5·3	5·6	6·0	6·0	5·4	4·9	5·2	6·1	6·1	5·8	5·5	4·5	4·4	4·4	4·4
3	4·9	5·0	5·0	4·5	4·4	5·5	6·4	6·9	7·0	6·5	5·5	4·9	4·9	5·0	4·7
4†	5·0	4·9	4·9	4·3	4·3	5·5	6·5	7·0	6·5	5·5	4·7	4·5	4·4	4·5	4·5
5	4·7	4·7	5·1	4·8	4·7	5·1	5·7	6·4	6·2	5·4	4·8	4·5	4·5	5·0	4·8
6	5·1	5·1	5·7	5·5	4·9	4·3	4·3	4·4	4·6	4·6	4·1	3·9	4·1	3·9	3·7
7	5·3	5·4	5·1	4·8	4·3	4·5	4·9	5·3	4·9	4·9	4·8	5·0	4·9	4·8	4·5
8	4·9	4·9	5·0	5·0	4·6	4·3	4·5	5·0	5·0	4·9	4·5	4·4	4·9	4·9	4·2
9	5·0	5·0	5·0	4·5	4·1	4·8	4·9	4·8	5·0	5·0	5·0	5·0	5·0	5·0	4·5
10	4·8	4·7	4·7	4·3	4·0	4·0	4·4	4·6	5·0	4·8	4·5	4·3	4·4	4·6	4·3
11	4·9	5·1	5·2	4·9	4·1	4·1	4·4	4·0	4·0	3·9	3·5	3·6	4·3	5·0	4·7
12	4·4	4·9	5·5	5·9	5·5	4·9	4·4	4·5	4·1	3·1	2·8	2·7	3·5	3·8	4·1
13	4·5	5·0	5·5	5·6	5·6	5·5	5·4	5·4	4·9	4·2	3·9	4·0	4·4	4·4	4·2
14	4·6	4·8	5·2	4·8	4·2	4·5	6·1	5·4	4·9	4·5	4·4	3·8	3·9	4·7	4·6
15	5·1	4·8	4·7	4·5	4·5	4·8	5·0	4·9	4·7	5·5	5·6	5·4	5·3	5·2	4·9
16	5·1	5·1	5·5	4·8	3·8	2·8	3·5	4·6	5·2	5·2	5·6	5·2	4·9	4·8	4·7
17†	4·9	5·4	5·6	4·9	4·3	4·7	4·8	5·0	5·4	5·7	5·6	5·0	4·9	5·0	4·9
18	5·5	5·6	5·8	4·7	4·0	3·7	4·4	5·3	5·6	5·5	5·6	5·2	4·8	4·8	4·6
19†	5·0	5·0	5·0	4·5	3·4	3·1	3·9	4·9	5·6	5·5	5·7	5·5	5·5	5·6	4·9
20†	5·2	5·3	5·1	4·4	3·8	4·4	5·5	6·3	6·4	5·4	5·3	5·9	5·6	5·6	5·1
21	5·5	5·4	5·1	3·9	2·7	3·1	4·9	5·5	5·5	5·4	4·9	4·8	4·9	4·9	4·8
22	5·3	5·4	4·9	4·2	3·8	3·9	3·9	4·5	5·2	5·6	5·4	4·7	4·9	4·3	4·3
23†	5·4	5·5	5·1	4·1	3·1	3·1	3·7	5·4	5·9	5·9	4·9	4·9	5·0	5·0	4·4
24	5·4	5·6	5·2	4·6	3·8	3·8	4·8	5·4	4·7	4·3	4·2	4·1	4·1	4·5	4·4
25	6·1	6·5	5·8	5·1	4·6	4·8	5·7	6·1	5·2	5·1	5·4	5·1	4·7	4·8	4·7
26	5·9	6·0	6·2	5·4	3·8	3·9	4·5	4·5	3·8	4·1	5·0	5·1	4·6	4·6	4·5
27	5·3	5·4	5·4	4·7	3·4	3·2	4·1	4·3	4·1	4·1	4·1	4·1	4·2	4·7	4·8
28	5·8	6·0	6·0	5·6	4·5	4·9	6·1	6·3	5·8	4·7	4·1	4·1	4·8	5·1	4·8
29	5·5	5·7	5·7	5·1	4·6	5·9	6·5	6·5	6·1	5·4	5·1	4·9	5·1	5·2	5·1
30	5·0	5·1	5·2	4·4	4·0	4·5	4·9	5·4	5·2	5·1	4·8	4·6	4·6	5·1	4·8
31	4·8	5·0	5·1	4·5	3·6	4·6	4·9	5·1	4·8	4·8	4·6	4·7	4·8	4·9	4·9
Mean	5·2	5·2	5·8	4·9	4·2	4·4	4·9	5·3	5·2	4·9	4·8	4·6	4·7	4·8	4·6
Mean†	5·1	5·2	5·1	4·5	3·8	4·2	4·9	5·7	5·8	5·6	5·4	5·2	5·1	5·1	4·8

† Five international quiet days.

‡ All the figures in this table represent *westerly* declination.

DECLINATION (WESTERLY‡), 1928.

(Averages for periods of sixty minutes centered at the full hours of Greenwich mean time.)

NOVEMBER. 0° PLUS TABULAR QUANTITIES.

Hours. (G. M. T.)									Mean.*	Maximum.		Minimum.		Date.
15	16	17	18	19	20	21	22	23		Time.	Mag.	Time.	Mag.	
′	′	′	′	′	′	′	′	′	′	H. M.	′	H. M.	′	
4·6	4·7	4·7	4·7	4·6	4·4	4·3	4·2	4·8	4·8	14 9	4·1	6 9	6·8	1
3·1	3·8	3·8	3·1	3·4	3·6	3·8	4·2	4·4	3·9	13 53	4·2	0 49	5·7	2
3·8	3·6	3·3	3·7	3·5	3·1	3·5	3·8	4·0	3·9	13 21	2·2	6 57	6·0	3
4·3	4·3	3·7	3·9	3·9	3·9	3·9	4·2	4·3	4·2	12 9	3·1	6 9	5·8	4
4·3	4·6	4·4	4·3	4·2	4·2	4·4	4·6	4·7	4·5	4 9	2·8	12 53	4·9	5
4·4	4·6	4·8	4·7	4·6	4·6	4·5	4·4	4·7	4·5	3 53	3·7	7 15	5·9	6
4·7	4·6	4·3	4·2	4·1	4·1	4·1	4·2	4·3	4·6	11 9	3·9	5 39	5·9	7
4·9	4·9	4·9	4·9	4·7	4·7	4·7	4·6	4·6	4·5	9 57	3·7	7 9	5·9	8†
4·7	4·7	4·9	4·8	4·8	4·9	4·9	4·9	5·2	4·8	4 17	3·3	6 45	6·0	9†
5·6	4·9	3·9	3·9	3·9	4·0	3·9	4·2	4·7	4·2	14 17	2·3	7 53	5·9	10
4·9	4·9	4·9	4·9	4·8	4·6	4·1	4·3	4·9	4·4	3 57	2·3	12 49	6·0	11
4·7	4·9	4·6	4·6	4·6	4·5	4·2	3·6	3·7	4·2	18 9	2·3	6 9	5·8	12
4·1	3·9	3·2	2·8	3·3	3·3	3·6	3·9	3·9	3·9	8 37	3·1	6 1	6·0	13
4·6	4·7	4·4	4·3	4·1	4·0	3·9	4·2	3·9	4·5	10 33	2·4	6 9	6·1	14
4·3	4·2	4·3	4·2	4·1	3·8	4·3	4·9	5·4	4·5	8 57	2·3	14 9	5·9	15
5·0	4·9	5·0	4·8	4·5	4·2	3·9	3·9	3·7	4·6	10 29	2·5	6 9	6·0	16
4·4	4·8	4·3	4·3	4·2	4·1	4·1	3·9	3·9	4·3	8 53	2·3	16 9	5·9	17
4·5	4·8	4·7	4·5	4·8	4·3	4·7	4·4	4·7	4·6	8 45	3·7	7 9	6·0	18
4·8	4·8	4·8	4·6	4·5	4·4	4·7	4·8	4·9	4·6	4 9	3·5	1 41	5·1	19
4·8	5·0	5·0	5·0	4·9	4·7	4·6	4·7	4·9	4·9	9 9	3·7	1 29	5·9	20
5·0	5·0	5·0	4·9	4·9	4·8	4·8	5·5	5·5	5·3	5 33	4·5	7 9	7·0	21
4·7	4·7	4·9	4·9	4·8	4·4	4·4	4·4	4·9	4·3	14 9	4·3	6 9	6·0	22†
5·0	4·7	4·7	4·7	4·3	4·1	4·4	4·9	5·3	4·7	8 9	3·1	2 9	5·9	23
4·6	4·8	4·8	4·8	4·2	4·2	4·6	5·1	5·2	4·7	8 29	3·2	4 9	6·0	24
3·9	4·9	5·0	4·9	4·7	4·9	5·0	5·1	5·7	4·8	8 9	2·8	1 9	5·9	25
4·1	4·6	4·6	4·6	4·4	4·5	4·6	5·0	5·7	4·7	8 21	3·6	1 9	5·9	26
4·9	5·0	4·8	4·7	4·7	4·7	4·7	4·8	5·5	5·3	13 25	4·5	2 9	6·9	27
4·5	4·5	4·6	4·7	4·7	4·7	4·7	3·9	3·9	4·8	9 17	3·8	2 5	6·1	28†
4·7	4·9	5·0	4·9	4·9	5·0	5·1	5·3	5·5	4·9	8 9	3·8	2 9	6·1	29†
5·0	5·0	5·0	5·1	4·8	4·8	4·6	5·3	5·1	5·2	5 9	4·6	1 45	6·1	30
4·5	4·6	4·5	4·5	4·4	4·3	4·4	4·5	4·7	4·6					Mean.
4·7	4·7	4·9	4·8	4·8	4·7	4·7	4·7	4·8	4·8					Mean.†

DECEMBER.

4·8	4·8	4·8	4·7	4·5	4·5	4·5	4·9	5·1	4·7	9 29	2·3	2 29	6·5	1
4·4	4·6	4·6	4·7	4·7	4·7	4·7	4·6	4·8	5·1	22 21	4·3	2 9	6·4	2
4·7	4·8	4·8	4·7	4·9	4·6	4·5	4·5	4·9	5·1	4 29	4·2	2 29	7·1	3
4·3	4·3	4·5	4·5	4·5	4·7	4·9	4·7	4·6	4·9	3 49	4·2	6 49	7·3	4†
4·6	4·8	4·8	4·7	5·1	5·1	5·1	5·3	6·5	5·1	11 45	4·1	22 29	7·8	5
3·9	4·0	3·7	4·1	4·2	4·3	4·6	5·0	5·5	4·5	10 57	3·5	2 9	6·1	6
4·2	4·4	4·6	4·5	4·7	4·5	5·0	5·0	5·6	4·8	14 49	4·1	6 49	6·9	7
4·3	4·6	4·7	4·7	4·8	4·9	5·0	4·9	4·9	4·7	14 9	4·0	7 45	5·2	8
4·4	4·6	4·7	4·7	4·6	4·6	4·7	4·8	4·8	4·7	4 29	4·0	6 29	5·1	9
4·5	5·0	5·0	5·0	4·9	4·8	4·5	4·6	4·8	4·6	4 29	3·9	8 49	5·1	10
4·8	4·9	5·0	4·5	4·6	4·6	4·0	3·9	4·0	4·3	4 5	2·9	12 9	5·6	11
4·3	4·5	4·4	4·4	4·2	4·2	4·0	4·2	4·3	4·3	10 29	2·2	3 29	6·1	12
4·4	5·0	5·1	5·0	4·8	4·6	4·5	4·2	4·4	4·8	10 29	3·7	3 25	6·1	13
4·5	4·4	4·5	4·5	4·5	4·6	4·6	4·8	4·7	4·6	11 33	3·2	7 9	5·9	14
4·9	5·0	4·9	4·9	4·9	5·0	5·1	5·1	4·9	4·9	11 29	4·4	9 9	6·9	15
4·7	4·7	4·8	4·7	4·6	4·7	4·8	4·7	4·7	4·7	5 29	2·4	2 9	6·1	16
4·9	5·0	5·1	5·0	4·8	4·7	4·9	5·0	5·1	5·0	4 29	4·2	9 9	6·0	17†
4·7	4·7	4·8	4·8	4·5	4·4	4·4	4·6	4·9	4·8	5 29	3·5	1 49	5·8	18
4·8	4·8	4·8	4·9	5·1	5·0	4·9	4·7	4·9	4·9	4 29	3·9	10 9	5·9	19†
4·8	4·9	5·1	5·1	5·1	5·1	5·3	5·3	5·4	5·3	4 29	3·6	8 9	6·7	20†
4·7	5·1	4·9	4·6	4·9	5·0	5·1	5·5	5·4	4·9	4 29	2·6	6 49	5·9	21
4·5	4·5	4·5	4·6	4·7	4·7	4·8	5·0	5·2	4·7	4 9	3·7	9 9	5·9	22
4·4	4·5	4·8	4·9	4·9	5·0	5·1	5·1	5·3	4·7	4 29	2·9	7 17	5·6	23†
4·4	4·5	4·1	4·6	4·7	4·9	5·2	5·5	5·8	4·7	4 29	3·7	7 9	6·7	24
4·8	5·0	5·0	5·2	5·1	5·1	5·5	5·4	5·1	5·3	5 29	4·2	2 9	6·7	25
4·6	4·7	4·7	4·6	4·7	4·8	4·9	5·1	5·1	4·8	4 29	3·2	1 49	6·8	26
4·8	4·8	5·0	5·0	4·9	4·9	5·0	5·1	5·5	4·6	5 29	3·1	2 9	6·9	27
4·8	4·0	4·8	4·7	4·7	4·6	4·7	4·8	5·2	3·1	10 49	3·0	6 29	6·9	28
5·2	5·0	5·1	4·9	5·0	5·0	5·0	4·9	4·8	5·3	4 9	4·5	0 9	7·0	29
4·8	4·9	4·8	4·7	4·7	4·5	4·8	4·8	4·8	4·8	4 9	3·9	7 29	5·8	30
4·7	4·9	4·8	4·8	4·9	4·9	5·0	4·9	5·0	4·8	4 9	3·5	6 49	5·4	31
4·6	4·7	4·8	4·7	4·7	4·7	4·8	4·9	5·0	4·8					Mean
4·7	4·7	4·9	4·9	4·9	4·9	5·1	5·1	5·1	5·0					Mean.†

* See footnote on page 88.

† Five international quiet days.

‡All the figures in this table, represent *westerly* declination.

(Averages for periods of sixty minutes centered at the full hours of Greenwich mean time.)

JANUARY. 37000γ PLUS TABULAR QUANTITIES.

Date.	Hours (G. M. T.)														
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	137	142	146	147	144	167	184	167	171	161	148	136	133	140	144
2	125	127	127	127	130	131	138	140	131	122	115	119	129	132	133
3	138	139	139	136	142	154	165	173	165	154	147	144	141	141	141
4	144	147	149	147	149	167	163	170	165	149	141	131	133	133	126
5	143	141	139	142	146	154	163	159	157	149	141	140	142	141	136
6	139	139	143	146	150	159	161	162	153	143	133	132	135	136	139
7	139	137	138	140	144	167	173	180	171	158	148	142	143	142	142
8	144	144	146	148	148	154	168	174	171	162	153	147	143	142	143
9	149	149	148	148	152	165	180	186	177	165	152	141	133	135	132
10	135	138	141	143	145	148	155	165	164	155	150	146	145	144	141
11†	136	138	143	146	153	172	186	198	189	173	156	148	144	143	141
12†	144	143	144	146	143	149	164	177	177	168	161	151	144	141	141
13†	141	142	144	145	153	163	169	168	160	155	154	139	135	132	131
14†	140	143	145	146	146	147	148	144	140	143	146	148	147	144	141
15	145	146	149	150	163	168	175	173	166	162	158	150	157	156	156
16	163	165	163	159	161	168	168	164	160	161	159	154	147	146	143
17	162	164	166	167	167	162	174	176	170	167	162	160	156	155	151
18	153	153	154	159	167	172	176	172	161	157	148	136	126	123	120
19	149	148	148	154	160	163	163	153	152	153	153	151	147	146	148
20	143	149	151	155	158	165	163	158	150	154	154	153	152	142	135
21	150	152	157	161	167	170	172	168	160	151	144	139	139	141	140
22	147	147	149	154	159	170	176	180	176	166	152	137	131	134	135
23	143	146	153	162	170	184	192	188	185	172	148	132	119	116	120
24	134	138	146	156	166	176	187	190	182	171	160	146	137	126	133
25	143	148	154	164	166	180	193	196	194	183	171	158	149	140	134
26	140	141	147	158	168	189	205	212	207	189	170	161	157	157	158
27	135	144	161	169	169	171	175	166	172	164	149	121	083	083	087
28	105	108	116	128	139	149	156	165	164	155	126	118	115	102	115
29	129	129	127	125	127	138	146	152	153	155	148	133	124	128	127
30	134	135	137	139	147	165	179	187	183	170	157	146	131	123	120
31†	135	137	135	131	132	136	145	152	153	152	149	146	146	146	147
Mean .	140	142	145	148	152	161	169	171	167	160	151	143	137	135	136
Mean†.	139	141	142	142	145	163	163	167	161	158	153	150	147	145	144

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1	143	145	148	153	158	162	183	193	197	191	185	174	161	152	148
2	144	145	148	150	152	156	162	165	171	176	160	158	153	154	155
3	145	141	141	142	143	146	156	163	168	166	151	144	129	117	124
4	141	144	151	159	165	170	181	185	189	169	149	132	114	110	119
5	145	148	157	169	179	188	191	193	184	173	161	153	147	135	138
6	143	147	148	153	164	177	181	176	172	167	161	155	150	150	151
7	145	148	156	167	181	193	197	200	197	190	175	159	151	147	146
8†	144	149	155	159	170	182	187	186	180	168	157	148	143	142	146
9†	142	147	152	162	175	187	190	192	186	174	164	156	151	148	148
10†	150	154	158	164	171	179	185	189	191	188	180	170	163	154	142
11†	147	149	152	156	160	169	176	175	168	160	157	152	149	147	144
12	146	148	147	148	152	164	172	184	201	191	186	179	175	161	154
13	150	143	145	145	152	176	178	179	183	171	174	174	167	163	142
14	135	135	133	137	142	149	151	173	145	134	130	134	138	132	133
15	133	133	136	144	151	159	161	161	160	154	149	145	151	152	147
16	141	144	150	156	161	168	169	172	167	159	149	139	147	148	148
17	138	137	142	145	153	160	164	164	161	155	140	148	154	144	144
18	148	149	157	175	190	210	216	211	199	181	164	139	121	113	121
19	136	143	152	161	166	181	186	189	185	173	170	161	148	135	138
20	141	145	148	152	162	175	183	185	188	183	169	161	154	147	147
21	129	126	131	139	152	166	175	181	180	178	176	163	129	123	132
22	137	136	143	158	172	183	187	192	187	173	163	152	144	144	143
23	137	137	139	151	169	188	194	193	181	186	171	148	140	139	142
24†	143	145	150	157	172	187	195	199	194	184	173	163	155	152	151
25	158	159	166	176	188	202	197	199	193	186	173	163	144	144	137
26	126	129	143	153	170	191	206	211	202	180	176	148	133	129	125
27	142	145	145	153	163	174	185	201	193	173	168	162	156	150	145
28	144	142	139	145	159	177	189	194	186	173	162	154	148	143	129
29	144	143	144	146	163	163	169	178	180	176	166	157	153	151	149
Mean .	139	144	147	154	164	175	182	185	182	173	164	154	147	142	142
Mean†.	145	149	153	160	169	181	187	188	183	176	166	158	152	148	146

†Five international quiet days.

JANUARY. (Averages for periods of sixty minutes centered at the full hours of Greenwich mean time.) 37000γ PLUS TABULAR QUANTITIES.

Hours (G. M. T.)									Mean.*	Maximum.		Minimum.		Date.
15	16	17	18	19	20	21	22	23		Time.	Mag.	Time.	Mag.	
γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H. M.	γ	H. M.	γ	
139	136	137	139	149	136	141	131	124	144	7 41	178	23 17	122	1
130	126	124	130	132	131	135	136	137	130	8 59	102	10 4	112	2
141	139	140	141	142	143	146	149	144	146	5 53	173	2 33	126	3
127	132	133	135	136	140	141	141	141	143	6 41	171	14 13	121	4
138	134	135	134	136	137	137	137	139	142	5 53	164	15 13	130	5
137	136	139	137	137	135	136	139	139	142	6 25	163	10 17	129	6
138	136	136	137	140	141	142	143	141	146	8 33	181	15 25	132	7
144	142	141	141	143	144	145	144	143	149	7 5	175	17 49	138	8
130	132	129	126	132	132	136	138	134	144	6 41	190	17 13	118	9
136	131	129	131	132	131	132	133	136	142	7 9	167	16 49	127	10
140	140	141	143	145	143	141	140	140	152	6 49	196	0 17	136	11†
142	141	140	142	144	143	143	141	141	149	7 9	178	12 49	140	12†
150	148	145	144	143	142	140	139	140	150	6 5	169	21 33	138	13†
139	136	136	138	140	141	141	144	146	143	6 29	149	0 17	140	14†
156	156	155	156	156	154	152	156	159	158	6 17	176	0 9	145	15
146	147	147	146	148	150	151	152	151	155	5 33	172	14 9	141	16
149	150	150	152	153	154	154	153	153	157	6 21	181	14 49	149	17
132	135	136	138	141	141	141	147	149	147	5 37	176	23 53	116	18
144	142	142	140	139	137	140	147	143	149	5 29	167	19 33	125	19
132	129	130	135	141	147	145	145	147	149	5 13	167	15 53	122	20
143	141	141	142	143	146	146	147	147	151	5 21	176	10 37	138	21
136	133	131	131	131	131	133	138	143	147	6 49	180	11 33	129	22
121	120	126	126	128	128	132	132	134	145	5 53	196	12 49	112	23
135	133	130	138	139	140	141	143	133	150	6 41	193	13 45	121	24
140	142	144	144	136	135	136	135	137	155	6 25	196	20 5	131	25
167	167	167	167	163	164	167	166	166	162	7 15	216	21 19	131	26
077	084	087	085	091	097	100	102	104	110	5 33	182	12 49	021	27
120	118	122	127	124	124	131	130	128	130	7 15	166	12 49	95	28
128	117	114	134	125	125	129	132	135	134	6 37	152	10 41	108	29
129	130	131	130	142	134	138	136	135	145	6 37	187	13 25	119	30
146	143	143	143	143	141	143	143	143	143	8 45	164	2 49	130	31†
136	135	135	137	138	138	139	140	140	146					Mean
143	142	141	142	143	142	142	141	142	147					Mean†

FEBRUARY.

147	144	146	144	143	149	153	146	146	159	7 37	198	19 45	139	1
151	149	143	136	151	150	141	141	145	153	8 33	178	17 33	134	2
124	115	111	119	120	124	139	139	139	138	6 49	165	16 21	106	3
135	139	137	136	140	141	143	144	145	146	6 33	190	12 19	106	4
130	138	141	143	144	145	143	143	142	155	6 41	195	12 53	132	5
148	148	152	148	148	152	148	147	147	155	5 45	182	19 3	141	6
145	144	144	145	150	153	147	146	144	161	7 1	207	17 29	141	7
146	145	140	133	138	140	140	140	140	153	8 13	188	17 53	128	8†
148	147	145	147	148	148	147	148	135	158	6 53	192	0 13	141	9†
138	137	143	141	141	142	147	146	150	159	7 53	192	16 49	134	10†
142	137	135	138	139	143	144	143	143	151	6 29	178	16 53	123	11†
154	151	155	155	151	159	165	160	159	162	7 33	208	18 49	145	12
141	141	134	125	122	119	129	142	137	151	8 5	188	19 25	116	13
128	123	127	124	122	127	141	133	131	135	6 33	153	16 21	116	14
146	141	139	134	139	133	134	137	141	145	5 9	162	17 41	129	15
147	145	143	143	142	139	139	135	136	150	6 53	173	11 1	131	16
139	132	131	139	145	143	143	143	145	146	6 17	165	16 25	129	17
137	138	130	123	122	131	140	137	135	153	5 33	233	12 49	107	18
127	133	128	124	125	133	136	138	139	151	7 7	178	18 41	116	19
142	143	142	137	143	133	135	144	134	154	8 11	191	23 33	125	20
136	137	137	134	135	127	148	141	139	147	7 23	185	12 01	118	21
141	143	142	140	140	138	148	148	143	154	6 53	194	0 49	134	22
139	140	139	139	141	137	141	142	143	154	6 23	197	0 49	135	23
147	143	138	140	144	147	149	153	158	160	7 51	200	17 9	135	24†
132	131	140	142	136	135	132	134	132	157	5 35	206	16 9	126	25
123	116	114	138	139	135	139	138	141	151	7 4	211	16 29	109	26
142	141	137	139	140	142	149	152	147	156	6 1	203	17 13	134	27
126	127	137	139	138	141	143	144	144	151	6 59	194	14 9	123	28
146	144	141	141	141	143	144	144	144	153	7 29	181	17 17	140	29
140	139	138	137	139	140	142	143	142	152					Mean
144	142	140	139	142	144	144	146	145	155					Mean†

*The daily mean values of horizontal force, derived from 24 hourly values have been corrected for progressive change by 1/48 of the difference between the values of the initial and terminal hours.
†Five international quiet days.

Gx l 28

133512

(Averages for periods of sixty minutes centered at the full hours of Greenwich mean time.)

MARCH. 37000γ PLUS TABULAR QUANTITIES.

Date.	Hours (G. M. T.)														
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	145	144	144	151	165	183	193	197	189	179	169	161	158	150	145
2†	144	146	147	156	171	187	193	193	186	172	162	155	151	149	149
3	145	147	152	162	179	193	200	201	192	178	168	161	159	156	154
4†	150	151	156	166	182	196	201	199	194	182	171	164	158	156	155
5†	152	154	158	169	187	179	192	197	191	181	172	167	166	163	160
6	158	157	162	173	186	199	207	206	197	183	167	158	149	146	146
7	150	150	150	156	167	181	191	197	195	186	174	163	158	151	144
8	141	141	145	154	168	181	191	199	195	184	168	157	149	145	141
9†	141	145	148	155	167	181	194	205	199	182	168	157	153	152	150
10	145	144	142	147	159	176	191	193	189	179	169	162	159	156	158
11	155	156	154	160	173	188	201	208	212	191	145	103	072	043	021
12	063	074	075	080	093	124	125	139	136	130	118	100	107	103	102
13	112	117	124	137	143	158	172	178	173	164	155	136	126	121	110
14	108	114	103	116	117	135	145	144	131	118	102	081	085	094	096
15	117	118	120	123	141	169	180	185	177	162	146	134	130	128	122
16	126	126	131	140	154	175	187	193	186	177	168	157	153	151	145
17	135	138	147	165	189	212	219	216	206	181	151	134	130	127	127
18	125	127	131	143	167	198	173	193	189	179	159	143	131	126	130
19	134	137	141	152	164	177	187	190	181	168	159	154	150	148	144
20	143	145	144	152	171	191	196	197	194	183	167	153	147	145	142
21	140	141	247	160	178	190	196	193	185	172	162	156	143	134	130
22	132	136	137	151	172	188	196	192	182	173	162	148	140	138	137
23	123	128	130	136	147	165	175	178	165	145	127	124	126	124	123
24	138	141	147	159	175	190	198	196	186	175	162	150	133	139	138
25	130	144	150	157	170	199	209	209	206	189	166	142	137	130	133
26	138	139	146	160	177	192	201	202	199	184	164	144	134	134	139
27	141	143	147	161	183	205	217	213	199	187	174	162	153	149	149
28	142	144	148	157	174	196	201	204	197	185	174	163	154	149	151
29	147	148	152	160	175	193	203	206	203	192	173	156	151	154	154
30	149	149	150	156	176	192	198	197	190	180	173	163	161	160	156
31†	150	149	150	162	181	194	199	199	191	182	170	160	156	157	152
Mean	136	139	141	151	166	183	191	194	187	174	160	147	141	138	136
Mean†	147	149	151	160	174	187	196	199	192	180	169	161	157	155	153

APRIL.

1	150	152	160	177	198	218	226	227	219	217	195	169	143	138	139
2	138	139	142	155	174	177	190	195	185	175	166	156	150	146	139
3	128	123	123	146	172	198	202	198	187	169	143	126	117	121	122
4	131	131	130	140	163	183	198	210	195	168	144	132	130	129	132
5	129	122	126	142	161	187	196	191	174	161	145	138	132	131	131
6	141	141	146	160	184	197	209	206	192	174	160	154	150	145	140
7	139	139	144	167	190	208	205	207	199	182	166	152	152	147	144
8	131	128	124	137	156	179	186	191	186	171	149	141	131	128	125
9	129	131	142	159	182	207	218	213	204	192	180	167	147	126	111
10	132	135	140	156	181	208	202	206	209	191	167	161	148	132	123
11	136	137	143	157	181	201	206	207	198	176	176	163	151	143	138
12†	139	141	145	158	177	203	217	221	213	203	192	177	149	157	152
13†	146	147	150	160	177	193	211	202	189	159	147	138	132	140	140
14	147	147	151	164	181	196	205	208	205	198	193	185	180	173	167
15	164	164	167	171	187	206	212	207	190	175	165	166	169	168	163
16	155	153	147	157	177	194	199	197	191	173	154	143	145	145	148
17	149	136	141	156	171	183	187	186	178	162	156	148	145	144	142
18	136	138	145	157	174	184	195	198	188	174	170	163	155	147	144
19	145	144	145	158	180	199	207	207	196	182	168	159	155	157	156
20	143	137	129	132	149	160	179	165	163	154	146	141	136	131	135
21	144	149	154	159	177	200	207	204	189	159	147	138	142	149	146
22	138	139	143	155	169	179	199	196	194	188	181	170	160	152	147
23	150	150	152	160	176	191	201	202	197	188	177	171	168	162	158
24	150	150	159	175	193	207	213	216	206	193	184	170	162	161	159
25†	160	163	166	179	197	211	212	218	213	202	189	178	171	166	161
26	157	160	162	169	178	193	198	199	197	197	194	185	174	163	155
27	156	156	159	173	189	200	201	199	196	192	186	170	177	169	163
28†	166	168	166	178	194	202	208	200	189	184	180	175	173	169	165
29†	161	164	171	186	202	222	230	229	223	212	202	192	182	176	163
30	166	168	177	192	218	239	248	246	238	221	205	191	181	176	171
Mean	144	147	148	161	180	197	204	205	197	184	172	162	155	150	147
Mean†	152	154	160	172	189	206	214	214	208	193	180	173	165	160	

†Five international quiet days.

(Averages for periods of sixty minutes centered at the full hours of Greenwich mean time.)

MARCH. 37000γ PLUS TABULAR QUANTITIES.

Hours (G. M. T.)								Mean.*	Maximum.		Minimum.		Date.
15	16	17	18	19	20	21	22	23		Time.	Mag.	Time.	Mag.	
γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H. M.	γ	H. M.	γ	
141	135	134	138	140	141	141	143	146	155	7 9	199	16 51	131	1
146	145	144	144	145	145	144	145	147	155	5 59	194	16 9	142	2†
153	151	149	149	151	153	154	154	151	163	6 33	+202	0 17	148	3
151	148	147	147	148	148	149	149	150	163	6 9	202	17 31	146	4†
158	160	159	156	156	155	156	156	158	166	6 45	198	0 0	162	5†
146	146	146	146	148	146	148	151	151	163	6 11	209	19 15	141	6
144	139	135	137	137	134	134	136	139	156	6 47	199	17 37	132	7
137	136	140	141	137	133	136	139	141	154	6 51	199	20 9	132	8
145	140	137	139	141	142	141	141	143	157	7 7	207	19 55	137	9†
152	150	142	139	145	146	147	143	149	158	6 37	196	18 9	135	10
002	037	045	035	043	048	055	065	066	105	8 1	216	15 7	—9	11
096	106	095	098	111	107	111	117	112	107	7 17	152	0 0	62	12
101	084	088	107	093	098	095	103	109	126	7 9	179	16 22	77	13
095	096	118	111	107	109	118	117	116	112	6 17	149	11 37	73	14
121	116	117	126	122	122	122	121	121	135	6 37	186	16 29	112	15
127	127	124	131	133	133	132	133	132	148	6 53	195	16 33	119	16
123	118	113	118	116	116	117	118	124	147	6 49	221	17 21	113	17
127	122	120	122	126	124	140	135	134	140	6 53	183	16 59	117	18
135	132	132	136	137	135	138	140	140	151	7 9	192	15 37	130	19
140	139	134	135	133	135	133	135	140	154	6 27	199	17 7	131	20
139	126	120	119	122	124	129	130	130	147	6 50	197	18 17	117	21
133	128	119	119	118	119	118	118	119	145	6 17	199	17 10	117	22
128	132	137	137	137	140	139	136	137	139	6 38	181	13 29	119	23
137	137	138	138	137	137	136	141	140	153	6 35	206	12 2	128	24
120	126	134	137	136	138	141	141	139	153	6 0	215	12 21	113	25
137	140	138	135	138	141	140	139	140	154	5 59	205	13 9	131	26
146	145	143	142	142	143	141	140	141	161	6 13	219	22 15	138	27
151	150	149	146	142	145	146	146	146	161	6 47	207	19 11	138	28
154	151	150	149	148	149	148	148	149	163	6 41	207	20 25	146	29
153	151	150	149	148	149	148	153	148	163	6 21	201	19 5	144	30
152	152	151	150	150	150	150	149	148	165	6 34	201	1 25	147	31†
152	131	131	131	132	133	134	135	135	149					Mean.
150	149	148	148	148	148	148	148	149	161					Mean.†

APRIL.

146	137	129	122	127	127	131	137	137	163	6 43	229	17 41	120	1
136	137	139	140	142	143	141	141	138	153	7 7	198	23 53	126	2
108	101	109	119	122	114	144	13-	138	142	6 45	207	16 1	100	3
132	126	120	126	134	130	126	128	123	144	6 30	218	17 42	115	4
129	137	134	138	138	138	137	135	142	146	6 17	199	13 9	127	5
134	129	131	135	136	143	139	133	131	155	6 53	213	20 9	131	6
139	140	136	133	138	135	130	152	132	157	5 21	212	23 5	130	7
118	118	114	119	123	123	131	128	128	141	7 11	195	17 24	111	8
110	113	115	127	129	129	134	134	131	151	6 9	217	14 33	106	9
129	131	130	131	130	134	135	132	132	153	5 21	215	13 41	121	10
136	141	140	138	137	137	138	138	137	157	6 29	209	15 17	134	11
149	147	145	143	143	145	145	145	145	165	6 33	224	0 13	137	12†
157	154	153	151	148	146	147	148	147	166	6 21	204	20 29	144	13†
163	160	161	165	164	162	161	162	162	174	6 41	209	0 49	146	14
164	166	170	171	166	164	154	144	143	171	5 49	214	23 29	140	15
154	147	139	132	145	143	138	129	135	155	5 49	204	18 13	119	16
137	138	144	143	143	137	142	140	137	151	5 13	189	1 37	131	17
142	149	140	141	143	142	143	145	145	158	6 49	199	0 13	136	18
151	147	144	143	144	137	136	135	133	159	6 13	209	23 25	131	19
145	147	146	147	143	136	138	140	141	144	7 21	168	2 53	123	20
139	132	130	146	141	141	139	141	138	155	6 17	213	16 17	123	21
146	149	148	148	146	153	152	151	149	160	7 17	198	0 29	137	22
155	152	146	150	149	145	142	143	145	164	6 53	205	17 9	142	23
167	165	163	163	165	153	155	163	167	171	6 53	219	0 29	148	24
161	159	159	158	158	154	153	153	153	175	6 49	220	21 17	151	25†
153	152	153	154	154	153	155	153	154	169	7 5	203	19 57	151	26
168	166	163	156	154	155	157	156	155	171	6 1	204	17 1	147	27
164	163	163	163	163	161	159	159	160	173	5 53	209	19 49	155	28†
160	159	159	160	160	160	160	161	163	181	6 13	232	16 17	158	29†
169	166	165	165	165	161	162	159	158	188	6 13	249	22 49	156	30
145	143	143	144	145	144	144	144	143	160					Mean.
158	157	156	155	155	154	153	153	153	172					Mean.†

*See footnote on page 101.
†Five international quiet days.

MAY. (Averages for periods of sixty minutes centered at the full hours of Greenwich mean time.) 37000γ PLUS TABULAR QUANTITIES.

Date.	Hours (G. M. T.)														
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1†	181	166	176	193	214	231	237	234	222	205	193	182	178	175	172
21	170	170	178	194	210	226	229	229	221	211	201	192	183	177	173
31	168	167	171	184	193	209	216	216	210	201	195	188	180	173	168
4	167	172	183	200	217	233	243	244	238	227	213	194	177	161	151
5	158	157	161	181	186	183	184	170	167	169	173	177	161	145	136
6	153	158	159	159	162	166	170	166	167	168	172	172	168	163	156
7	147	146	155	176	198	220	228	232	228	218	204	185	172	157	147
8	144	153	159	179	196	212	225	231	215	186	168	153	138	129	124
9	146	151	168	189	185	202	209	205	202	190	169	148	136	131	133
10	149	163	160	173	189	213	228	232	224	210	194	180	161	144	136
11	124	113	111	124	140	156	152	147	144	145	142	142	135	120	106
12	114	128	122	141	150	163	159	168	172	144	093	099	106	112	113
13	132	133	136	143	157	166	166	157	150	142	121	109	108	115	118
14	139	138	144	160	164	185	190	195	171	151	136	138	127	125	118
15	147	141	133	142	159	178	193	205	182	171	163	151	146	142	141
16	180	173	162	168	183	192	193	190	186	180	171	160	145	143	150
17	136	143	136	143	151	168	174	173	166	160	145	144	142	144	144
18	152	151	148	152	149	118	156	161	164	103	151	147	143	140	134
19	139	140	156	173	185	197	201	199	188	160	156	150	146	142	137
20	144	149	157	166	177	184	186	186	184	177	170	169	166	154	149
21	152	153	159	167	178	184	189	190	184	176	167	157	156	152	149
22†	154	159	165	172	178	188	196	196	191	183	173	165	161	155	149
23	154	161	162	161	177	187	193	193	187	180	172	160	158	158	157
24	158	161	168	177	183	192	197	202	198	186	179	172	165	164	162
25	155	159	163	170	175	182	186	175	174	171	168	147	140	139	142
26†	149	151	159	172	187	197	209	207	199	184	169	160	165	155	151
27	177	181	188	203	218	238	245	240	228	216	199	173	164	155	150
28	087	100	104	112	106	100	084	050	037	027	003	−6	−2	−8	−14
29	077	081	075	074	095	108	097	093	103	084	081	075	081	045	048
30	092	098	113	121	133	144	144	144	150	142	120	119	118	116	112
31	114	118	127	40	155	167	172	180	177	171	161	144	133	134	127
Mean .	143	145	150	161	173	184	188	187	182	171	159	150	144	139	136
Mean† .	160	163	170	183	197	210	216	216	208	197	186	179	173	167	163

JUNE.

1	128	130	127	134	143	150	153	166	174	169	150	144	144	141	139
2	120	117	126	148	158	175	184	187	185	179	187	179	169	156	150
3	141	137	140	147	151	163	171	170	171	167	155	141	131	126	127
4	134	134	139	149	163	169	161	170	174	171	165	153	145	141	138
5	129	133	137	135	140	170	193	198	189	184	193	171	164	155	148
6	137	137	136	147	160	189	195	194	188	179	176	167	157	145	139
7	141	143	149	168	172	189	193	197	196	179	167	155	121	118	111
8	122	125	127	148	158	167	170	173	172	158	132	112	116	118	114
9	133	144	141	149	160	174	190	184	173	165	154	139	130	131	133
10†	134	139	142	146	148	158	165	170	169	161	154	145	139	137	137
11†	138	141	146	153	161	171	180	183	176	172	165	152	152	150	150
12	153	158	164	169	171	174	174	173	177	167	140	107	91	114	126
13	127	133	141	157	179	178	185	194	183	169	113	70	62	95	103
14	138	138	142	149	165	168	152	145	149	147	140	125	116	115	115
15	130	131	138	149	153	157	162	159	154	158	142	138	129	137	135
16†	142	144	147	156	168	173	179	177	168	159	159	158	154	149	149
17†	143	147	151	157	161	178	191	189	186	181	169	158	152	145	141
18	149	150	154	162	175	190	193	194	196	188	177	165	153	150	151
19	154	156	165	181	199	215	213	201	192	187	175	161	156	155	153
20	155	161	168	183	206	235	238	226	217	201	187	174	164	160	159
21	170	162	167	171	185	190	198	200	200	193	184	167	156	147	141
22	142	156	167	175	190	211	223	214	181	121	132	117	118	91	82
23	122	131	143	150	170	165	184	183	180	172	156	145	134	131	138
24	134	143	153	157	178	194	179	179	187	184	166	150	140	138	127
25	146	145	155	175	190	212	219	217	207	185	167	161	154	148	141
26	139	145	150	156	166	175	187	193	192	185	169	158	163	151	147
27†	153	147	152	162	176	193	202	213	206	193	182	170	158	149	146
28	145	153	161	170	179	193	206	221	215	203	185	163	163	145	137
29	145	143	147	148	159	177	186	185	186	179	177	160	163	150	147
30	153	155	158	161	166	168	175	178	171	170	166	155	151	153	151
Mean .	140	143	148	157	169	181	187	187	183	174	163	149	141	138	136
Mean .	142	143	148	156	168	175	183	187	181	173	166	157	151	146	144

†Five international quiet days.

MAY. (Averages for periods of sixty minutes centered at the full hours of Greenwich mean time.) 37000+ PLUS TABULAR QUANTITIES.

Hours (G. M. T.)									Mean.*	Maximum.		Minimum.		Date.
15	16	17	18	19	20	21	22	23		Time.	Mag.	Time.	Mag.	
γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H. M.	γ	H. M.	γ	
171	169	167	169	170	167	164	165	170	136	5 47	237	21 49	163	1†
173	170	168	167	169	170	170	171	171	137	6 33	240	19 9	165	2†
164	163	163	163	163	163	164	166	166	136	6 5	218	15 17	161	3†
141	141	147	154	154	153	150	152	158	132	6 9	247	15 21	137	4
172	164	163	148	142	141	138	155	151	134	5 45	194	18 41	135	5
147	147	149	148	147	148	147	147	149	138	10 21	174	21 33	145	6
142	137	135	139	143	145	142	147	143	140	7 17	237	17 17	132	7
131	133	136	141	142	142	143	143	145	131	6 37	235	13 37	119	8
151	150	149	148	147	147	147	147	147	133	5 41	212	11 13	144	9
143	133	113	113	117	119	109	113	129	103	6 33	236	21 25	99	10
103	081	097	104	101	102	117	126	118	123	5 41	164	16 21	70	11
117	116	118	126	130	123	125	125	124	129	8 17	174	9 57	88	12
117	112	112	110	114	123	129	135	136	131	5 13	171	11 25	108	13
120	128	133	133	137	136	136	137	137	145	6 13	204	13 53	116	14
139	136	140	141	141	146	147	158	168	155	6 49	199	2 17	130	15
153	144	139	147	154	159	142	129	131	161	5 13	195	22 25	126	16
138	139	143	146	146	145	147	146	150	148	5 45	177	1 29	130	17
126	127	136	139	128	144	137	139	139	146	8 17	168	14 41	121	18
137	135	137	136	142	139	142	143	144	155	6 49	204	15 41	131	19
143	145	146	147	147	149	150	151	150	160	6 49	188	15 13	141	20
144	150	157	157	157	158	156	157	154	163	6 29	191	14 37	142	21
146	143	146	151	156	155	155	154	155	164	5 29	200	15 49	142	22†
151	142	143	147	148	151	153	156	157	162	6 57	196	16 17	140	23
162	162	161	162	161	158	157	154	153	170	7 5	203	22 29	151	24
144	145	148	152	151	149	151	152	152	157	6 23	190	13 0	139	25
160	152	155	157	160	164	167	171	173	170	6 23	208	14 45	149	26†
177	167	174	166	073	071	069	069	068	163	6 29	246	20 41	57	27
—10	—5	035	057	083	048	032	035	045	46	3 23	123	13 45	—21	28
057	070	070	078	079	099	094	087	088	80	8 5	108	13 3	41	29
109	110	110	113	114	112	114	113	114	121	7 49	152	16 53	107	30
123	126	129	140	147	134	135	133	129	142	7 13	184	16 23	121	31
135	133	135	137	139	137	138	139	140	152					Mean.
151	150	150	152	153	153	154	155	157	177					Mean.†

JUNE.

138	136	133	124	133	121	115	114	122	120	8 3	177	21 59	110	1
154	154	152	143	134	131	129	135	138	155	9 57	195	19 7	121	2
132	126	115	115	129	129	120	125	124	140	7 25	173	17 43	109	3
133	126	126	126	126	131	133	130	130	145	8 10	175	18 27	122	4
142	138	137	144	151	142	140	145	152	156	9 41	203	21 31	133	5
137	136	135	132	135	142	137	141	140	154	6 1	200	17 36	131	6
124	110	100	102	104	111	120	120	123	140	6 5	197	16 55	94	7
113	119	126	129	131	134	136	137	136	137	8 25	175	10 53	107	8
131	130	133	132	133	133	133	136	132	145	8 57	197	11 49	127	9
136	136	137	139	139	137	136	137	137	145	7 57	174	20 57	134	10†
151	151	151	151	148	147	148	155	156	167	6 53	184	0 13	139	11†
125	122	121	123	127	127	126	125	124	140	8 1	185	11 49	88	12
108	111	114	116	118	119	122	133	134	132	7 13	198	11 37	46	13
123	127	128	130	132	135	137	136	133	137	4 53	175	14 33	110	14
130	135	133	136	138	138	138	140	140	142	6 53	167	11 33	123	15
145	145	146	147	148	147	148	146	144	154	5 33	179	0 53	141	16†
134	137	143	145	149	150	151	150	150	157	6 13	192	14 57	132	17†
152	151	149	149	147	150	149	152	154	163	7 49	198	18 13	145	18
149	146	149	148	147	144	145	150	151	166	5 37	219	16 59	141	19
160	161	163	159	165	163	157	153	147	178	5 49	241	22 49	138	20
143	144	146	147	147	146	146	146	145	164	7 25	203	14 9	140	21
94	103	113	117	117	114	123	126	125	139	5 45	232	13 41	77	22
134	130	128	131	134	137	137	135	132	140	6 17	191	0 12	123	23
128	140	138	139	137	139	140	139	140	151	9 17	195	14 25	121	24
136	134	141	138	135	135	139	143	139	161	6 17	221	16 13	132	25
145	129	127	140	138	137	138	139	141	155	8 13	194	16 29	135	26
148	148	149	149	145	143	148	147	145	163	7 1	216	19 53	140	27†
132	130	136	137	137	136	135	138	150	184	7 9	227	15 49	128	28
146	148	153	156	154	148	152	153	151	158	6 33	189	0 33	142	29
152	151	148	149	151	153	153	153	152	158	6 37	180	12 5	147	30
136	135	136	137	138	137	138	139	139	151					Mean.
143	143	145	146	146	145	146	147	146	155					Mean.†

*See footnote on page 101.
†Five international quiet days.

(Averages for periods of sixty minutes centered at the full hours of Greenwich mean time.)

JULY. 37000γ PLUS TABULAR QUANTITIES.

Date.	Hours. (G.M.T.)														
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	155	158	161	165	178	193	212	217	217	210	193	170	169	161	150
2	149	152	156	161	173	189	202	220	229	249	218	195	174	139	119
3	153	152	159	160	157	168	175	179	181	184	183	175	163	158	151
4	151	155	166	175	185	194	200	199	197	192	180	167	152	144	144
5	156	156	157	167	176	180	196	202	195	185	179	167	159	153	142
6	155	158	161	162	171	182	201	201	210	202	193	185	168	150	149
7	150	150	150	154	163	173	174	169	150	161	151	145	0	134	140
8	220	50	103	97	49	—60	—80	—177	—266	‡	290	—215	—177	—146	—92
9	3	32	4	63	76	86	89	90	85	81	70	59	60	64	58
10	69	72	82	96	103	105	118	104	123	121	104	76	86	80	76
11	99	91	101	105	110	122	127	117	117	121	115	109	101	97	95
12	97	101	105	112	115	128	144	153	150	137	123	110	104	102	99
13†	103	106	111	124	140	156	161	163	158	141	123	112	110	108	109
14	107	112	114	128	137	140	146	152	152	148	141	133	123	112	109
15†	115	115	124	129	136	170	172	173	170	163	148	136	125	123	119
16†	121	118	115	113	121	137	149	149	161	173	159	142	136	129	124
17†	120	126	132	141	155	169	174	173	165	159	146	136	131	128	124
18	144	143	145	153	164	176	177	171	166	162	150	141	128	123	120
19	109	112	112	123	143	166	189	191	181	159	139	126	116	113	117
20†	122	123	122	120	127	140	148	154	159	147	143	139	141	140	137
21	137	141	143	154	179	191	192	190	189	186	186	177	169	169	164
22	137	127	126	121	111	119	142	142	136	103	96	89	82	83	84
23	113	117	120	123	140	162	160	165	157	150	144	139	131	130	119
24	117	119	119	127	138	154	166	173	165	150	130	121	114	113	114
25	122	125	130	142	159	174	189	195	188	174	159	145	131	118	107
26	119	113	114	119	129	147§	173§	183§	172§	145§	119§	104§	94	91	90
27	144	135	130	134	172	181	200	207	198	186	178	163	155	151	151
28	136	136	146	157	174	178	183	192	197	186	170	143	112	115	124	113
29	124	129	135	145	151	158	162	166	162	159	152	143	130	125	123
30	133	133	133	136	144	159	167	172	171	163	151	139	141	143	143
31	130	142	152	167	181	184	192	203	203	197	187	172	160	149	131
Mean¶ . .	123	126	131	138	148	160	168	170	167	161	150	139	132	126	122
Mean† . .	116	118	121	127	140	154	161	163	161	157	146	134	129	126	123

AUGUST.

1	117	119	112	115	119	138	152	156	154	152	146	142	144	141	139
2	137	139	148	162	180	190	202	206	204	197	187	173	157	146	142
3	149	143	145	155	182	188	194	197	187	178	168	151	142	141	143
4	143	147	153	164	179	201	213	213	204	186	17	172	161	153	139
5	146	130	118	112	113	133	1 3	118	128	132	116	097	089	086	086
6	105	127	146	155	162	172	181	174	165	163	15	135	120	1 6	116
7	114	110	117	121	121	129	134	146	131	122	103	098	108	104	105
8	1 0	121	126	131	142	155	169	171	171	160	149	141	135	1 9	128
9	136	137	137	144	160	180	194	205	202	191	171	159	149	134	128
10†	137	138	142	151	164	183	196	201	198	193	185	174	160	150	145
11	141	141	142	151	169	184	189	189	186	149	134	140	137	134	134
12	145	146	155	160	163	168	171	165	148	153	151	133	132	126	118
13	128	132	136	159	167	169	167	165	156	146	13	133	138	139	133
14†	135	134	135	139	147	161	170	173	173	170	166	144	136	139	139
15†	147	146	147	151	162	165	179	180	177	164	160	153	147	141	139
16	143	141	138	140	141	142	149	160	167	167	164	156	151	146	146
17	157	156	160	171	173	196	198	195	189	178	164	156	155	15	151
18	161	151	150	155	171	190	203	207	203	190	17	163	161	160	155
19	147	147	147	152	162	184	196	200	202	192	178	169	161	156	154
20†	152	151	155	162	174	184	194	198	197	187	179	163	154	154	156
21	149	151	150	156	170	189	205	216	216	209	192	174	161	158	157
22†	152	153	159	174	192	211	224	226	221	213	20	186	171	161	157
23	163	163	170	182	197	207	206	206	214	208	191	176	169	159	156
24	156	150	150	158	168	181	187	192	189	172	157	150	145	139	142
25	143	142	140	142	157	172	191	193	190	180	166	159	153	145	143
26	138	139	155	173	171	152	136	116	103	094	094	090	073	054	080
27	117	136	101	111	084	063	0 8	077	097	077	076	084	063	076	084
28	103	105	110	122	138	149	153	154	146	143	144	130	122	123	121
29	117	119	123	133	146	155	162	165	165	160	155	15	146	142	139
30	133	135	141	151	164	171	178	186	189	173	159	150	144	146	144
31	141	145	145	149	165	179	189	185	183	175	168	165	155	150	147
Mean‡ . .	138	139	141	148	157	169	176	178	175	167	157	147	141	136	134
Mean† . .	145	145	148	156	168	183	193	196	193	187	176	164	154	149	148

†Five international quiet days.
‡ Speck out of Photographic paper owing to a very great magnetic storm.
§ Driving clock under cleaning. Eye-readings at full hours substituted.
¶ Mean of 29 days, 8th and 26th omitted.

JULY.

(Averages for periods of sixty minutes centered at the full hours of Greenwich mean time.)

37000 + PLUS TABULAR QUANTITIES.

Hours (G. M. T.)									Mean.*	Maximum.		Minimum.		Date.
15	16	17	18	19	20	21	22	23		Time.	Mag.	Time.	Mag.	
γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H. M.	γ	H. M.	γ	
158	154	154	157	154	149	145	145	146	170	6 33	217	22 49	144	1
116	129	136	141	143	149	148	147	160	166	8 37	263	14 37	104	2
152	149	145	146	141	144	165	156	148	161	9 29	196	19 25	125	3
149	143	144	143	145	148	146	151	149	163	7 45	207	15 53	141	4
137	142	149	148	146	148	149	161	156	162	6 49	203	14 49	132	5
151	160	153	149	145	145	146	160	150	166	7 53	211	20 25	142	6
139	138	138	146	149	156	155	160	152	155	23 49	468	12 45	131	7
−78	−31	3	23	19	30	14	18	20	‡	3 41	187	7 57	−282	8
48	50	57	61	67	69	70	69	65	65	4 33	103	0 13	27	9
76	81	80	81	87	87	86	86	83	91	6 21	127	0 13	68	10
91	93	96	96	95	98	102	97	93	103	6 41	134	0 17	80	11
89	95	99	103	104	103	103	103	105	112	6 49	163	16 9	86	12
109	108	105	104	104	107	111	110	110	121	6 29	166	17 5	103	13†
107	109	110	114	114	113	115	115	115	124	6 53	157	14 57	107	14
119	121	124	129	124	125	123	114	116	135	6 49	174	21 29	111	15†
124	124	124	124	126	124	124	123	121	132	9 13	178	3 5	107	16†
127	127	129	131	133	133	138	142	143	141	6 19	177	0 13	120	17†
118	123	128	128	128	125	126	126	116	140	5 37	183	23 49	107	18
119	116	118	118	119	120	120	121	121	128	7 5	170	0 13	107	19
136	136	136	137	135	139	137	133	131	137	6 53	175	2 49	119	20†
154	148	151	147	153	149	146	143	151	164	7 5	197	23 39	133	21
84	85	85	106	111	98	102	108	99	105	6 24	126	11 29	80	22
118	118	117	117	118	118	118	119	121	131	7 13	173	15 37	115	23
116	111	105	104	101	102	105	111	119	126	6 33	175	18 45	99	24
124	1 0	123	120	120	124	120	120	121	130	6 47	188	13 57	104	25
93	103	106	111	113	117	119	103	125	§	23 59	149	12 57	89	26
151	146	138	137	140	147	136	136	138	159	7 1	213	16 17	134	27
109	115	114	109	118	119	1 3	123	121	131	5 15	180	15 1	100	28
108	121	114	118	122	125	128	131	133	135	6 57	168	15 5	107	29
140	135	135	135	139	137	135	133	133	144	7 25	175	17 25	122	30
128	135	123	105	98	130	117	119	124	151	7 17	208	19 21	97	31
120	121	122	123	123	126	125	126	127	138					Mean.¶
123	123	124	125	124	126	127	125	124	133					Mean.†

AUGUST.

138	139	140	138	140	136	132	136	140	137	6 17	161	2 33	105	1
140	139	13	137	136	133	134	13	137	169	6 25	209	20 37	129	2
143	143	142	141	142	141	141	145	144	155	6 55	200	0 13	140	3
133	137	146	148	151	143	148	144	147	163	6 29	217	14 33	130	4
093	081	064	092	09'	106	116	107	097	108	0 21	148	17 17	58	5
119	121	1'6	127	126	120	120	118	113	137	5 49	188	19 51	106	6
104	101	111	117	120	117	117	118	119	116	6 37	148	10 35	87	7
131	135	133	132	134	136	135	133	132	140	6 47	176	0 33	119	8
126	128	130	133	133	134	135	137	137	151	7 1	20-	14 51	125	9
145	141	141	142	143	142	145	146	141	159	8 1	204	0 37	136	10†
131	127	128	130	136	141	144	146	148	147	5 51	193	18 49	127	11
119	117	108	101	106	119	126	124	127	136	6 21	174	16 13	99	12
131	134	133	133	133	133	135	135	134	142	3 21	166	0 13	127	13
137	136	138	141	142	142	142	140	141	147	6 49	176	12 26	133	14†
138	139	141	143	142	141	141	143	144	152	5 59	182	15 5	136	15†
140	143	147	150	153	152	158	157	157	151	8 55	170	2 26	135	16
150	147	147	146	146	148	148	148	148	161	5 15	208	19 29	143	17
147	142	139	144	140	140	145	147	148	161	7 6	211	19 33	135	18
152	149	148	147	147	148	148	150	152	162	7 32	205	0 23	146	19
157	152	146	146	146	143	142	142	147	162	6 20	199	16 53	144	20†
157	155	152	152	147	151	150	152	153	168	7 29	218	18 57	143	21
158	159	159	160	162	164	163	163	161	177	6 35	227	0 5	152	22†
155	156	156	158	160	161	159	158	158	174	7 37	217	15 25	151	23
143	140	139	137	142	147	146	147	146	155	6 49	193	17 13	131	24
143	145	145	147	148	147	147	148	149	157	6 37	193	2 39	137	25
102	108	102	118	109	114	136	123	119	118	3 36	179	13 13	42	26
086	091	096	096	096	102	106	108	104	99	0 49	143	4 45	47	27
116	117	117	120	126	126	113	118	120	126	6 37	161	0 17	98	28
137	134	134	135	133	133	130	132	133	141	7 13	167	0 41	116	29
142	141	137	137	138	137	139	140	139	151	7 49	191	0 5	131	30
148	149	149	147	147	145	148	151	151	157	7 39	191	0 1	140	31
134	134	133	135	136	137	135	139	138	147					Mean.¶
147	145	145	146	147	147	148	148	147	159					Mean.†

*See footnote on page 101.

†Five international quiet days.

‡ pack out of photographic paper owing to a very great magnetic storm.

§ Driving clock under cleaning. Eye-readings at full hours substituted.

¶ Mean of 29 days, 8th and 26th omitted.

(Averages for periods of sixty minutes centered at the full hours of Greenwich mean time.)

SEPTEMBER. 37000 γ PLUS TABULAR QUANTITIES.

Date.	Hours (G. M. T.).														
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	147	142	138	137	144	164	176	178	177	168	154	144	142	143	143
2	148	146	134	121	122	140	160	169	164	161	153	144	138	131	128
3	138	125	145	164	187	202	208	208	192	169	136	129	107	072	063
4	106	104	106	113	125	146	161	162	156	150	140	145	140	141	137
5	133	133	131	137	153	167	162	163	161	159	154	143	132	130	129
6	136	138	143	155	176	190	194	198	190	171	155	146	131	126	127
7	138	140	140	151	167	180	181	173	168	162	153	140	135	138	140
8	099	095	094	100	105	094	092	102	105	098	093	073	061	062	062
9	109	098	089	081	079	106	113	129	131	131	125	118	117	116	113
10	110	109	107	103	117	140	146	145	136	119	106	100	093	093	099
11	124	125	129	140	160	180	185	183	172	160	145	124	104	113	111
12†	123	123	119	117	124	135	143	148	153	150	142	137	136	139	139
13	145	150	143	147	159	176	186	192	191	183	175	158	147	148	146
14	150	155	160	161	167	177	180	173	168	164	154	145	140	137	134
15	157	156	159	166	176	183	189	189	188	177	166	159	151	149	148
16†	142	139	130	133	151	173	178	179	176	170	161	152	150	153	151
17†	149	144	135	133	144	157	166	182	189	185	178	171	167	163	161
18	155	151	147	151	166	175	173	178	179	178	173	166	169	173	169
19	129	117	120	127	167	164	176	170	166	162	135	095	084	079	098
20	123	126	137	159	176	188	192	192	186	171	152	143	137	132	133
21†	129	134	136	142	158	173	177	185	188	183	174	162	152	148	147
22	157	157	159	167	177	191	200	208	218	216	195	173	162	156	148
23	145	138	135	139	138	178	190	193	193	187	175	165	163	160	155
24	146	147	149	162	165	177	170	175	173	163	155	149	158	164	161
25	155	141	177	182	184	204	201	195	173	135	105	096	098	086	083
26	112	108	096	097	112	126	125	123	116	117	119	120	125	130	134
27	133	133	129	135	163	177	179	180	179	166	155	144	143	139	128
28†	143	145	150	161	182	194	213	209	198	182	165	157	156	156	154
29	147	151	160	171	194	216	238	247	235	210	187	177	169	165	165
30	170	174	179	190	200	217	221	215	196	188	179	167	158	149	141
Mean . .	136	134	135	141	154	170	176	178	174	164	152	141	135	133	131
Mean† . .	137	137	134	137	152	168	176	181	181	174	164	156	152	152	151

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1	152	153	166	164	152	209	224	224	216	199	188	177	166	163	158
2	149	149	146	152	171	198	209	201	182	160	138	112	104	093	084
3	123	125	123	129	143	153	163	163	156	135	133	124	122	111	111
4	143	143	138	143	155	169	179	185	185	175	161	150	146	140	151
5	163	162	163	167	175	188	194	200	196	170	157	136	106	101	108
6	130	131	130	137	152	168	175	167	163	161	154	145	135	132	133
7	143	139	135	127	119	133	142	144	133	123	114	114	115	117	124
8	133	142	136	139	150	159	162	166	161	155	146	138	145	147	145
9†	145	143	147	161	179	197	205	204	192	178	165	156	155	156	154
10†	160	157	157	168	190	198	229	216	199	184	175	167	148	173	171
11†	182	168	158	176	196	211	213	208	196	180	162	154	154	167	157
12	154	161	164	177	197	205	209	209	193	188	178	172	172	172	167
13	153	155	161	173	194	211	215	210	199	181	166	150	131	127	116
14	157	156	152	150	165	188	190	195	186	176	161	150	147	150	144
15	140	141	140	146	159	177	188	191	190	179	168	152	151	151	140
16	163	160	161	169	187	213	202	200	193	168	155	150	141	139	128
17	145	145	154	168	183	201	207	208	197	187	175	169	164	157	151
18	154	161	171	183	192	203	210	219	264	130	080	—56	—62	—67	—92
19	043	063	091	108	105	114	122	121	114	103	090	095	094	072	083
20	106	106	108	111	123	151	162	164	160	149	138	130	133	134	132
21	129	139	137	136	149	167	185	193	184	172	161	149	146	145	140
22	136	141	143	154	158	171	183	189	172	155	149	142	142	137	139
23†	130	134	139	150	164	182	181	172	167	161	152	147	144	140	137
24	146	149	149	158	174	183	195	210	181	160	151	130	114	120	130
25	148	106	066	074	075	093	092	078	097	087	094	095	097	103	100
26	105	122	132	151	161	175	189	168	179	163	158	153	147	139	137
27	143	145	152	170	188	209	210	176	137	125	117	122	126	129	128
28†	132	138	149	167	177	188	184	183	178	165	158	154	151	145	149
29	145	149	155	169	181	192	191	188	180	168	160	155	151	144	140
30	150	160	167	171	176	192	201	202	193	168	150	157	153	139	142
31	141	143	153	166	183	190	196	194	185	176	163	157	153	147	148
Mean . .	140	141	143	152	165	180	187	187	178	161	149	137	133	130	128
Mean† . .	143	146	150	163	181	195	203	196	186	173	163	156	154	154	154

†Five international quiet days.

(Averages for periods of sixty minutes centered at the full hours of Greenwich mean time.)

SEPTEMBER. 37000γ PLUS TABULAR QUANTITIES.

Hours.									*Mean.	Maximum.		Minimum.		Date.
15	16	17	18	19	20	21	22	23		Time.	Mag.	Time.	Mag.	
γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H. M.	γ	H. M.	γ	
142	141	142	143	142	148	151	148	154	151	7 17	179	3 13	136	1
127	127	128	129	131	133	133	134	135	138	8 29	166	3 29	116	2
064	065	077	087	084	101	101	101	102	125	6 53	215	16 53	51	3
136	130	131	128	134	127	131	131	132	135	5 49	164	0 13	103	4
130	126	143	138	124	126	131	132	134	141	5 29	169	16 28	120	5
131	132	131	134	137	137	132	133	132	149	6 57	202	13 46	123	6
079	041	042	075	061	047	068	C87	101	120	5 25	184	16 47	30	7
052	073	092	094	100	104	097	113	113	91	21 35	120	14 59	46	8
103	096	087	087	082	093	101	100	106	106	8 21	133	3 46	71	9
103	105	109	117	110	118	121	122	123	115	6 21	149	11 46	91	10
112	114	111	119	118	126	131	122	123	135	6 7	187	11 55	99	11
139	137	138	137	141	142	138	141	147	138	8 29	155	3 1	116	12†
130	122	118	132	134	127	130	142	145	132	7 39	192	16 47	110	13
129	129	133	135	135	136	137	137	139	149	5 39	188	16 33	124	14
144	139	135	135	133	135	139	140	140	152	7 9	190	2 14	125	15
147	145	145	146	147	147	148	149	148	153	7 21	180	2 29	128	16†
160	152	148	149	149	151	152	155	156	158	7 59	189	2 37	131	17†
166	173	162	153	157	128	122	106	112	157	15 49	185	22 44	90	18
082	083	096	088	106	117	121	122	122	121	5 43	180	12 48	70	19
129	132	136	137	132	127	126	128	128	147	7 14	195	0 10	125	20
145	144	145	141	143	147	154	156	160	156	7 49	188	0 13	131	21†
148	151	150	151	152	149	149	148	148	167	8 12	222	21 41	141	22
149	146	146	144	144	1 6	148	151	147	157	7 5	197	2 29	135	23
156	158	159	163	163	163	160	159	162	161	16 29	185	1 11	142	24
086	084	100	104	107	109	111	139	136	132	5 14	216	15 49	77	25
143	131	140	146	140	135	136	135	135	175	17 33	163	2 40	94	26
134	137	134	137	143	138	137	141	143	148	6 47	192	14 41	125	27
149	147	147	146	146	149	148	149	149	163	6 17	211	0 15	142	28†
160	158	156	160	160	163	167	170	171	169	6 39	252	0 13	148	29
145	149	149	149	149	149	149	151	153	170	6 39	227	14 5	140	30
127	126	128	130	130	131	133	135	136	143					Mean.
148	145	144	144	145	147	148	150	152	153					Mean.†

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150	138	133	141	142	140	145	152	151	168	6 9	231	16 41	124	1
088	096	087	088	111	128	123	122	122	133	6 23	213	17, 31	75	2
116	127	123	123	131	136	143	149	146	134	7 7	167	13 25	107	3
153	150	148	150	162	162	162	162	163	158	7 29	188	11 45	143	4
095	085	087	104	106	117	121	126	128	139	6 55	207	16 23	79	5
138	145	120	120	129	133	136	137	141	143	5 21	180	17 51	113	6
124	126	124	123	123	129	126	130	129	127	6 53	150	11 19	110	7
144	139	141	142	145	144	145	144	142	147	7 13	169	0 1	129	8
151	147	148	153	155	157	161	159	157	164	6 17	219	0 17	139	9†
168	164	162	163	164	163	162	161	166	174	5 53	242	1 57	154	10†
157	154	152	153	154	153	154	156	156	168	5 41	220	11 35	147	11†
159	155	155	156	155	154	153	155	155	172	6 27	217	0 9	143	12
102	100	100	112	118	131	143	148	147	153	5 57	218	16 9	98	13
134	130	134	137	133	131	133	139	140	153	6 27	199	20 9	127	14
142	141	146	149	144	144	155	156	149	157	7 29	195	20 9	137	15
117	114	129	133	141	142	147	147	146	156	5 15	224	16 26	98	16
147	141	137	148	147	139	133	148	149	162	6 21	212	20 57	117	17
—89	—13	—9	—65	—25	031	040	031	044	65	7 41	299	13 55	—108	18
083	091	089	096	096	100	104	105	103	97	6 7	131	0 27	36	19
127	120	123	126	125	124	127	134	132	131	5 29	171	0 13	100	20
124	128	130	134	134	136	134	136	141	147	6 55	199	16 51	125	21
136	141	132	123	136	146	138	131	127	147	6 41	193	18 27	118	22
137	136	143	143	144	143	140	141	144	149	5 21	191	0 15	129	23†
129	129	133	130	151	138	138	141	137	150	6 45	218	12 21	107	24
103	107	111	099	116	106	085	090	100	97	0 21	147	2 13	58	25
134	125	134	141	147	143	132	144	139	148	6 3-	199	0 7	101	26
127	130	130	129	137	131	133	134	133	143	5 49	225	9 41	115	27
143	141	142	141	147	145	144	145	143	155	5 19	196	0 11	130	28†
145	130	140	144	149	149	147	148	150	158	5 23	197	15 53	125	29
139	143	130	134	138	157	146	143	144	159	6 37	206	17 36	129	30
148	152	152	149	143	154	153	146	146	160	5 49	199	19 17	139	31
125	126	127	127	132	136	136	137	138	145					Mean.
151	148	149	151	153	152	152	152	153	162					Mean.†

*See footnote on page 101.
†Five international quiet days.

(Averages for periods of sixty minutes centered at the full hours of Greenwich mean time.)

NOVEMBER. 37000γ PLUS TABULAR QUANTITIES.

Date.	Hours (G. M. T.)														
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	146	150	158	171	182	198	204	201	188	169	157	155	150	147	149
2	166	170	173	174	173	166	161	144	127	113	114	109	97	90	83
3	135	143	148	149	155	162	165	165	164	146	121	95	83	88	115
4	118	123	123	131	142	144	151	154	154	146	142	134	108	104	117
5	136	140	141	151	165	163	171	173	169	161	156	151	151	150	145
6	151	154	157	168	177	186	187	189	181	170	162	160	152	147	145
7	151	154	163	168	178	184	195	199	192	180	172	164	165	162	160
8†	155	156	165	182	197	211	221	215	2 9	200	190	181	173	169	168
9†	171	1 3	181	196	212	224	232	227	214	201	189	181	174	173	172
10	182	186	2 2	218	229	238	240	250	240	209	178	168	132	87	54
11	129	137	149	167	179	196	202	203	188	170	157	155	158	157	163
12	172	163	159	168	174	190	203	199	186	178	165	154	147	145	140
13	149	150	153	161	167	178	178	167	160	150	125	118	110	103	106
14	111	123	131	143	161	166	172	71	167	154	140	131	121	119	127
15	137	141	148	160	188	196	201	201	188	171	160	149	159	158	167
16	163	152	163	181	189	205	212	206	183	176	151	152	152	149	141
17	161	157	169	177	184	203	209	208	194	165	158	152	144	145	149
18	152	157	178	164	179	189	193	176	178	147	146	153	154	152	150
19	154	154	167	167	178	187	192	195	189	177	174	168	165	163	163
20	155	155	165	176	187	194	199	198	184	171	168	160	167	160	162
21	163	167	172	182	192	198	200	201	194	187	183	176	174	172	172
22†	172	17-	179	188	197	205	211	209	2 3	198	193	187	185	178	176
23	175	178	1 8	191	198	187	182	169	152	145	145	151	153	151	146
24	166	171	1 2	191	199	206	206	191	175	158	143	133	125	113	115
25	164	160	170	177	187	190	190	184	177	168	163	152	146	137	134
26	165	167	174	185	192	201	204	196	183	167	178	143	139	139	133
27	169	173	181	191	200	207	208	198	181	169	164	160	157	151	149
28†	170	171	178	192	204	210	214	215	2 9	191	178	172	171	171	170
29†	174	177	1 8	197	207	212	221	217	2 8	195	187	184	179	173	173
30	181	185	194	201	206	213	216	208	199	188	187	191	185	177	176
Mean	156	159	166	176	185	193	198	194	184	171	161	155	149	145	144
Mean†	168	171	178	191	204	213	220	217	209	197	188	181	176	173	1 72

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1	183	181	183	202	219	220	211	206	193	173	182	184	176	170	168
2	178	181	183	193	197	201	210	211	210	206	200	190	178	177	176
3	164	169	171	177	185	194	180	189	186	185	182	176	173	174	172
4†	170	172	177	182	188	202	214	214	204	193	193	188	180	179	176
5	173	176	178	179	183	187	199	205	205	201	193	189	180	181	183
6	199	185	171	167	169	180	168	163	140	126	116	115	119	118	121
7	144	151	153	149	155	157	162	162	159	150	141	143	143	139	147
8	159	161	169	177	185	190	200	205	195	182	174	165	163	163	160
9	164	167	169	175	180	188	197	202	200	186	180	175	170	168	167
10	161	164	171	180	189	196	203	206	203	193	179	170	162	161	166
11	165	167	171	178	183	189	207	200	194	184	180	177	176	178	177
12	170	170	178	18	186	197	192	192	188	177	166	164	146	136	148
13	152	162	153	157	169	190	203	201	198	187	179	159	141	143	139
14	161	162	167	177	185	194	203	197	187	183	177	160	152	146	169
15	163	166	171	175	181	189	197	195	178	173	172	168	165	164	170
16	172	173	178	188	193	198	197	198	192	191	187	182	176	175	174
17†	174	177	182	192	203	213	215	215	207	197	193	187	183	181	178
18	180	181	181	181	185	191	196	198	195	188	181	177	176	166	172
19†	166	171	177	181	185	192	197	194	192	190	185	182	182	182	185
20†	179	179	181	18	184	183	177	176	174	174	179	183	181	180	178
21	184	187	192	189	186	191	200	202	194	178	198	193	188	186	189
22	179	181	177	169	173	181	179	176	176	174	169	165	167	165	163
23†	178	179	181	179	178	179	180	180	178	171	169	166	156	166	165
24	180	182	184	191	210	224	225	222	213	195	183	173	165	159	161
25	169	179	184	190	193	208	211	209	195	185	185	184	181	180	177
26	185	181	195	202	189	196	199	193	185	179	181	177	171	167	164
27	176	178	185	197	206	219	223	218	206	201	197	191	179	173	179
28	183	183	184	189	190	195	198	201	201	197	192	193	201	197	193
29	191	193	199	209	218	223	227	226	220	210	203	201	198	188	183
30	178	181	183	188	193	201	204	205	198	187	178	174	170	169	175
31	176	180	183	186	192	202	200	197	190	184	183	183	177	172	169
Mean	173	174	178	183	188	195	199	198	192	185	179	174	170	168	168
Mean†	173	176	179	183	187	194	197	196	190	185	184	181	178	178	176

†Five international quiet days.

(Averages for periods of sixty minutes centered at the full hours of Greenwich mean time.)

NOVEMBER. 37000γ PLUS TABULAR QUANTITIES.

Hours (G. M. T.)									*Mean.	Maximum.			Minimum.			Date.
15	16	17	18	19	20	21	22	23		Time.		Mag.	Time.		Mag.	
γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H.	M.	γ	H.	M.	γ	
149	158	167	171	174	159	156	158	161	166	6	15	207	14	45	145	1
93	97	113	117	116	118	126	127	129	128	2	43	180	14	3	77	2
128	98	77	110	115	117	114	115	115	125	5	59	169	12	45	63	3
129	126	118	118	142	139	133	137	137	133	6	49	158	13	17	97	4
139	137	138	136	138	141	144	147	150	140	7	9	175	18	9	132	5
145	148	149	150	148	149	143	143	151	159	6	53	193	21	37	139	6
158	149	146	142	144	142	145	149	156	163	6	35	199	20	13	136	7
168	165	168	168	169	168	169	169	171	180	6	3	225	0	0	155	8†
169	170	172	173	175	177	177	178	180	187	5	21	234	15	41	166	9†
44	82	108	114	121	124	124	124	124	136	7	3	268	14	53	34	10
134	152	166	173	179	180	176	161	171	167	6	37	205	0	0	128	11
139	148	157	158	152	155	148	146	160	162	5	41	206	41	41	134	12
89	73	73	89	115	100	99	108	109	125	4	55	183	17	5	58	13
124	128	133	140	141	141	141	142	143	141	6	1	175	0	0	111	14
122	101	121	135	145	145	154	170	166	154	6	41	205	15	47	98	15
139	144	143	144	146	146	149	147	148	161	6	59	219	14	9	130	16
138	154	143	142	143	156	155	149	149	163	6	31	215	16	26	125	17
150	150	158	163	156	161	159	161	161	160	5	59	197	10	9	140	18
161	154	161	147	150	153	155	157	158	166	6	33	199	17	3	142	19
164	160	160	162	163	162	161	163	163	170	6	15	204	0	9	151	20
171	169	167	171	171	171	170	171	171	176	6	41	204	0	1	162	21
179	171	171	175	173	168	169	173	171	183	6	9	214	20	45	164	22†
145	161	155	158	161	162	163	165	166	163	2	57	195	9	41	140	23
141	151	154	159	163	176	157	162	174	162	5	9	209	13	37	106	24
144	153	157	155	161	161	161	161	163	163	5	21	193	13	25	131	25
129	138	150	153	153	159	161	163	165	163	5	49	204	14	37	127	26
153	166	160	163	163	161	162	169	166	171	5	53	210	14	9	148	27
167	165	165	166	173	169	168	167	171	180	6	49	218	15	29	163	28†
172	172	175	177	177	177	178	178	179	180	5	59	222	14	9	168	29†
178	185	188	189	181	178	173	172	180	189	5	25	214	21	49	166	30
141	143	147	151	153	153	153	154	156	162							Mean.
170	169	170	172	173	172	172	173	175	183							Mean.†

DECEMBER.

163	163	161	161	160	162	166	168	170	180	4	29	228	9	11	161	1
172	169	169	172	172	169	171	174	164	184	6	1	22	23	5	162	2
171	170	172	169	172	165	167	167	169	175	6	1	190	0	5	162	3
168	163	165	169	171	173	174	173	172	182	6	1	214	17	5	161	4†
183	189	189	191	195	186	176	165	176	186	22	43	220	22	2	149	5
125	129	124	131	137	133	133	136	144	141	0	0	186	13	1	107	6
140	149	155	153	153	159	161	157	158	151	20	5	169	13	35	134	7
161	159	161	163	164	162	169	164	163	171	6	26	207	16	21	158	8
167	163	162	153	160	157	157	160	160	171	7	27	204	14	57	156	9
164	164	170	174	172	172	173	169	162	176	6	35	208	12	17	159	10
171	167	173	165	186	159	155	155	166	176	5	57	209	18	29	157	11
150	151	139	147	151	154	158	162	163	164	4	51	202	12	43	128	12
141	140	137	144	168	161	157	156	166	164	5	55	208	13	1	138	13
155	156	157	165	168	176	167	161	164	170	6	1	206	11	33	132	14
170	168	168	168	168	169	169	169	173	173	6	9	203	0	9	162	15
172	169	170	169	169	169	173	179	176	180	4	59	202	15	51	165	16
177	175	173	173	173	173	176	177	177	186	5	51	219	19	39	169	17†
168	163	159	159	163	156	159	162	164	175	7	11	190	19	49	155	18
182	178	177	179	180	181	181	181	180	183	5	9	197	0	0	165	19†
169	168	174	176	176	176	180	178	181	178	23	37	185	15	45	163	20†
167	162	167	166	163	165	169	177	180	181	6	49	204	14	41	158	21
163	157	165	170	167	166	171	172	175	169	5	1	185	12	53	147	22
159	162	168	170	171	174	175	175	178	173	2	9	182	15	15	158	23†
167	169	169	161	163	164	170	169	170	181	6	9	227	15	41	154	24
161	179	185	195	195	193	195	193	190	189	6	37	215	0	0	161	25
165	161	154	163	174	176	175	175	176	178	2	37	207	17	19	151	26
179	175	173	169	176	178	178	179	182	189	5	57	223	17	53	167	27
189	183	181	181	183	183	183	187	188	190	7	21	203	17	31	180	28
178	181	183	185	188	193	195	199	193	198	6	29	230	15	29	175	29
175	175	173	176	174	174	184	181	177	182	6	57	207	12	33	167	30
170	174	175	177	178	179	178	181	179	182	5	21	207	14	17	167	31
165	165	166	169	171	170	171	170	172	177							Mean.
171	169	171	174	174	175	177	177	177	180							Mean.†

*See footnote on page 101.

†Five international quiet days.

JANUARY. (Averages for periods of sixty minutes centered at the full hours of Greenwich mean time.) 17000 γ PLUS TABULAR QUANTITIES.

Date.	Hours. (G. M. T.)														
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	677	681	680	687	693	668	664	666	671	675	685	697	695	691	683
2	690	694	698	709	707	689	667	668	681	684	689	696	692	691	694
3	691	693	696	704	707	679	672	671	674	678	685	691	692	693	695
4	691	691	694	701	700	693	674	650	642	644	658	675	687	686	688
5	687	691	692	698	705	703	683	665	656	661	677	686	691	692	694
6§	693	693	695	704	708	703	..	..	..	..	..	..	..	..	..
7	696	697	700	709	708	691	684	648	637	634	647	694	698	700	703
8	694	694	698	708	692	657	648	651	661	690	674	676	673	673	678
9	677	677	679	684	685	665	654	655	658	661	663	666	668	669	672
10‖	670	671	676	684	682	..	..	..	..	658	660	663	660	653	654
11†	627	650	662	669	662	649	652	657	662	663	672	674	670	668	670
12†	678	681	686	692	685	652	635	641	651	659	665	672	673	673	675
13†	680	681	683	687	689	676	668	669	677	687	688	689	687	684	687
14†	682	683	686	691	686	672	666	663	667	678	678	673	673	677	678
15	677	677	679	685	687	686	668	643	628	634	674	679	682	681	676	678
16	670	670	675	683	695	676	661	653	657	666	671	680	685	688	682	682
17	665	666	667	675	676	666	658	658	663	673	676	676	671	669	670	670
18	671	671	674	678	680	683	679	670	673	679	677	679	680	682	685	684
19	686	688	688	693	708	727	702	688	692	695	693	694	697	698	699	699
20	694	695	695	696	696	696	689	675	667	691	696	689	693	693	693	693
21	684	684	688	691	687	679	671	665	673	675	672	674	675	676	676	679
22	677	677	677	681	686	683	671	662	670	676	673	670	671	675	676	676
23	672	672	677	685	676	673	651	648	657	667	669	662	658	661	667	667
24	668	667	668	668	672	663	648	652	662	671	678	680	675	671	674	674
25	676	675	674	679	681	675	672	677	681	683	677	665	659	660	668	668
26	668	667	663	662	667	662	660	659	666	677	685	682	677	678	682	682
27	683	683	685	689	683	666	659	660	665	692	691	683	674	670	678	678
28	681	680	677	678	675	668	650	650	672	681	681	680	675	674	677	677
29	687	689	694	698	693	679	677	688	697	702	704	699	690	694	699	699
30	695	695	697	703	702	688	676	677	686	687	690	693	689	685	689	689
31†	684	685	689	689	690	680	659	663	668	666	667	671	675	677	680	680
Mean‡ .	681	681	683	689	688	676	666	664	670	676	679	681	680	679	683	683
Mean† .	676	676	681	686	680	662	656	658	665	671	674	677	677	676	678	678

FEBRUARY.

1	674	676	679	683	679	660	638	635	645	655	663	665	668	666	670
2	671	673	677	682	688	669	648	643	647	655	667	674	676	676	681
3	687	687	691	697	700	691	675	675	684	689	688	687	689	689	695
4	701	700	701	705	706	697	688	685	690	694	695	698	703	705	709
5	708	705	707	716	716	708	693	684	688	702	709	709	706	703	707
6	696	696	698	699	695	695	689	685	690	694	697	695	687	683	686
7	680	680	681	682	685	679	658	648	658	669	675	674	665	661	664
8†	672	672	674	678	679	676	673	671	676	676	673	669	663	662	666
9†	676	675	672	673	673	671	668	670	673	674	677	679	677	673	674
10†	685	685	687	692	693	689	683	682	682	679	670	668	670	673	678
11†	683	682	681	683	683	683	683	679	672	672	671	670	672	672	672
12	665	665	665	668	669	649	651	648	650	653	660	660	653	654	657
13	659	661	663	669	670	663	662	659	656	654	651	653	655	657	659
14	659	658	657	658	660	664	666	666	665	660	657	659	663	665	665
15	672	672	672	673	677	673	666	660	674	669	668	674	677	679	681
16	682	682	680	682	680	702	699	697	698	699	697	694	692	693	694
17	692	694	695	697	697	693	689	688	688	688	688	687	687	690	694
18	688	687	690	701	704	700	693	686	692	696	695	691	688	688	692
19	691	691	691	693	697	702	704	703	708	706	705	702	696	690	690
20	686	684	683	689	698	702	697	690	688	686	671	673	674	676	682
21	682	682	684	689	687	672	663	668	666	661	659	659	659	662	669
22	675	671	674	684	686	676	673	668	667	663	664	667	662	660	667
23	675	675	677	682	684	680	677	676	678	676	678	680	675	673	675
24†	682	682	686	688	686	681	678	679	682	685	684	683	680	676	682
25	690	688	688	695	699	689	687	691	693	691	691	692	689	684	686
26	690	690	692	698	698	696	692	688	688	695	692	690	692	695	687
27	691	690	691	699	701	692	681	679	688	695	693	693	688	684	685
28	693	694	695	701	701	691	685	687	694	701	702	700	695	693	696
29	690	690	694	699	699	685	673	663	667	675	682	682	678	678	680
Mean .	683	682	684	688	689	684	677	674	677	679	680	680	679	678	681
Mean† .	680	679	680	683	683	680	677	676	676	677	675	674	673	672	674

†Five international quiet days.
‡ Mean of 29 days.
§ V. F. Magnetograph was under adjustment. The day has been omitted for means.
‖ Loss of record due to defective light. The day has been omitted for means.

JANUARY.

Averages for periods of sixty minutes centered at the full hours of Greenwich mean time.)
17000 γ PLUS TABULAR QUANTITIES.

Hours (G. M. T.)									Mean.*	Maximum.		Minimum.		Date.
15	16	17	18	19	20	21	22	23		Time.	Mag.	Time.	Mag.	
γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H. M.	γ	H. M.	γ	
692	692	692	692	692	693	691	692	692	695	11 19	704	6 17	683	1
692	691	691	690	689	688	688	689	690	690	3 57	712	6 9	660	2
694	692	691	691	691	690	689	689	690	689	3 9	708	20 41	669	3
689	688	686	688	688	688	686	686	686	686	3 58	702	8 11	638	4
694	691	692	692	693	692	691	691	692	688	4 13	708	8 13	652	5
...	...	...	...	...	691	692	693	695	...	...	...	...	...	6§
701	701	700	699	700	699	698	698	697	696	3 13	710	5 57	682	7
679	679	680	681	681	680	680	679	679	677	3 7	704	6 39	646	8
668	669	670	671	671	670	669	669	670	669	3 29	688	6 13	649	9
654	653	653	654	654	653	653	653	654	..	3 25	687	13 17	632	10‖
660	670	672	674	675	676	676	676	677	668	23 59	679	5 17	648	11†
677	678	678	679	679	679	679	680	680	678	2 53	693	5 57	633	12†
687	687	686	687	688	688	687	686	685	684	3 49	691	6 21	664	13†
678	679	678	680	680	679	679	679	679	678	3 21	692	7 17	661	14†
677	676	675	674	674	672	672	672	672	674	4 47	688	7 15	640	15
671	670	670	668	668	668	668	667	667	669	4 41	687	7 11	653	16
669	668	667	666	667	667	667	667	667	668	10 41	677	7 25	657	17
685	685	685	685	685	685	685	684	684	684	13 57	686	7 15	669	18
698	697	695	695	695	694	694	694	693	696	4 45	720	7 9	685	19
691	690	688	686	685	687	686	685	684	690	3 39	697	7 3	675	20
678	678	677	677	676	677	677	676	676	677	3 19	692	7 1	659	21
677	676	675	675	675	674	673	672	672	675	4 19	688	6 57	681	22
669	669	669	671	671	671	670	669	669	667	3 29	686	6 49	646	23
675	675	675	676	678	678	677	676	676	674	10 49	681	6 21	646	24
668	669	671	672	671	671	672	670	670	672	9 5	684	12 9	657	25
684	684	684	687	688	688	688	686	685	677	21 9	689	6 29	658	26
680	682	683	685	686	681	680	682	683	686	9 47	694	6 17	657	27
679	682	685	686	686	687	688	685	684	678	23 53	691	5 49	646	28
695	695	697	698	697	696	697	697	697	684	10 33	705	0 29	673	29
689	689	691	689	689	689	688	688	687	689	3 19	705	6 37	673	30
679	679	680	680	680	680	680	680	680	676	2 51	691	5 21	658	31†
682	682	682	683	683	682	682	681	682	680					Mean.‡
678	678	679	680	680	680	680	680	680	676					Mean.†

FEBRUARY.

671	671	672	674	675	674	676	676	676	667	3 39	685	6 45	631	1
681	680	681	681	682	685	684	684	684	674	3 33	688	6 45	649	2
697	698	700	709	701	701	701	700	700	693	3 39	702	6 46	672	3
711	710	711	713	712	711	710	709	708	708	18 21	714	6 43	682	4
705	704	704	703	702	700	699	697	697	703	3 35	718	7 33	683	5
687	686	685	685	685	682	680	679	678	682	2 41	701	23 37	677	6
665	665	667	668	669	669	668	666	665	669	4 1	686	6 49	648	7
667	667	669	669	669	668	667	667	665	670	3 57	686	13 5	660	8†
675	674	674	676	677	676	676	675	674	674	11 41	690	5 53	667	9†
680	679	681	683	684	684	683	681	680	681	3 39	695	10 49	667	10†
671	670	669	669	669	668	667	666	666	673	5 37	684	22 49	664	11†
660	660	662	663	660	661	658	656	656	657	2 27	667	7 25	642	12
661	660	660	663	663	662	664	664	663	661	3 33	672	9 45	648	13
665	665	665	666	666	668	673	672	672	664	21 41	675	2 41	655	14
681	680	681	681	683	684	683	683	683	677	20 37	685	6 23	664	15
694	692	690	691	692	692	691	691	691	692	4 21	704	2 9	679	16
693	693	692	691	692	691	690	689	691	693	3 39	698	11 29	686	17
695	693	694	697	695	693	693	692	691	693	3 37	707	7 13	684	18
690	690	691	692	691	690	689	688	688	695	8 21	710	23 41	687	19
685	683	681	687	689	687	686	685	683	683	4 23	703	8 37	664	20
672	672	673	675	676	674	672	672	669	671	3 31	691	10 53	656	21
668	669	669	670	674	674	673	674	674	671	3 45	688	12 57	658	22
677	676	677	679	680	679	679	678	678	678	3 37	695	12 23	671	23
684	683	683	684	685	684	684	684	683	683	2 49	689	13 1	677	24†
687	687	687	688	689	688	687	687	686	689	3 45	700	12 53	683	25
697	696	698	698	691	690	690	690	689	690	2 49	705	13 9	683	26
687	687	688	688	690	690	690	691	689	3 49	704	6 37	673	27
694	691	690	692	692	690	689	690	690	693	3 13	703	6 25	683	28
681	681	679	680	680	680	680	680	681	682	3 25	702	6 49	662	29
682	681	681	683	683	683	682	682	681	681					Mean.
675	675	675	676	677	676	675	675	674	677					Mean †

*The daily mean values of vertical force, derived from 24 hourly values, have been corrected for progressive change by 1/48 of the difference between the values of the initial and terminal hours.

†Five international quiet days.

‡Mean of 29 days.

§ V. F. Magnetograph was under adjustment. The day has been omitted for means.

‖ Loss of record due to defective light. The day has been omitted for means.

MARCH.

(Averages for periods of sixty minutes centred at the full hours of Greenwich mean time.)

17000 γ PLUS TABULAR QUANTITIES

Date.	Hours. (G. M. T.)														
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	688	689	691	695	689	676	676	674	676	680	683	682	677	675	680
2†	687	689	693	696	693	684	686	689	689	696	702	699	693	694	699
3	707	708	712	719	716	708	707	709	706	706	710	703	705	703	706
4‡	708	708	711	712	708	697	697	681	688	698	696	693	696	698	699
5†	700	703	707	705	692	681	671	666	670	678	686	692	693	693	696
6	693	695	699	702	699	689	682	673	667	682	693	697	697	694	697
7	708	708	711	715	717	707	693	687	685	694	708	715	714	712	713
8	711	714	719	721	717	709	700	690	687	700	714	719	719	720	723
9†	725	725	728	731	731	718	701	687	685	699	713	718	714	715	718
10	714	715	721	721	711	698	686	677	676	688	693	695	699	702	705
11	704	704	710	715	712	705	694	687	681	682	691	695	696	699	703
12	700	701	705	707	700	687	679	668	656	666	679	687	691	692	693
13	693	694	698	702	704	7 3	691	682	681	685	690	691	692	698	701
14	694	696	699	696	689	676	668	661	664	669	672	672	669	672	675
15	672	676	682	687	688	691	683	668	663	669	671	670	667	668	673
16	678	682	689	692	690	686	676	664	664	671	676	674	672	672	674
17	675	678	687	689	683	669	658	653	659	667	671	664	657	660	664
18	669	674	681	679	672	675	670	660	651	656	667	662	657	659	664
19	670	672	677	681	679	677	677	677	675	674	676	666	664	676	677
20	677	680	689	689	684	678	682	673	672	676	676	674	669	671	675
21	678	678	684	685	678	670	661	653	654	667	675	675	669	667	671
22	672	673	679	681	671	662	647	647	655	666	675	678	672	667	670
23	673	676	686	679	668	658	647	655	670	685	689	686	686	686	688
24	697	701	708	709	703	689	672	668	676	684	689	690	687	687	691
25	692	694	699	694	679	673	660	657	671	686	693	694	685	685	692
26	694	696	700	700	697	689	681	675	678	689	698	696	689	689	691
27	693	695	700	698	685	672	667	665	669	682	694	691	685	681	683
28	691	693	700	698	688	667	662	656	676	689	693	688	670	674	677
29	681	687	694	694	683	659	653	655	668	680	685	683	676	673	674
30	684	689	696	687	67	663	658	667	681	687	689	688	684	684	683
31†	692	699	703	695	676	659	659	674	685	694	695	691	683	682	685
Mean .	691	693	698	699	693	683	676	671	673	682	688	688	685	685	688
Mean† .	703	705	708	708	700	688	681	679	683	693	699	699	697	697	699

APRIL.

1	697	703	705	697	686	662	650	655	672	687	700	700	694	687	689
2	694	698	705	698	681	664	653	665	679	689	695	692	687	685	687
3	692	696	703	699	675	639	627	646	673	695	709	706	693	681	684
4	685	689	695	691	674	643	624	650	679	694	699	695	689	684	684
5	693	700	703	699	668	646	641	648	670	674	678	680	679	680	686
6	693	701	706	696	682	664	652	654	665	674	683	692	695	693	693
7	703	707	705	695	684	673	681	662	679	694	698	703	701	695	696
8	701	708	711	702	692	685	666	663	678	688	701	709	705	699	701
9	705	711	719	704	691	666	661	670	678	688	703	711	708	701	701
10	702	710	718	710	689	671	657	659	672	687	696	699	696	692	690
11	691	695	699	690	679	664	662	664	668	674	681	684	684	679	678
12†	684	688	694	691	680	666	662	663	671	683	696	700	694	685	685
13†	698	704	709	703	690	667	655	666	676	685	695	698	701	698	697
14	707	715	720	714	702	691	678	679	6 0	701	705	706	708	707	707
15	711	719	721	709	695	680	677	679	689	701	709	709	708	7 3	703
16	708	713	718	710	702	689	683	684	691	695	699	702	703	705	704
17	705	709	710	703	692	683	669	675	679	687	690	693	693	693	691
18	693	697	701	698	690	675	659	657	669	681	695	696	693	689	688
19	693	700	700	687	664	637	639	644	653	669	684	692	695	689	691
20	697	701	711	702	707	677	663	663	672	685	694	699	698	696	687
21	690	695	696	688	676	653	656	671	690	703	707	706	703	706	710
22	705	697	693	693	690	698	688	685	690	699	711	717	712	714	713
23	714	716	709	709	699	686	678	677	681	691	696	701	701	698	695
24	698	702	706	701	693	681	673	677	684	694	700	709	705	699	693
25†	697	703	708	696	693	681	668	667	672	683	689	696	698	694	692
26§	705	715	71	709	683	685	656	667	..	..	..	..	705	699	691
27	703	710	706	695	687	678	669	667	671	678	680	685	691	692	696
28†	691	699	696	684	675	668	665	669	685	679	684	683	677	671	669
29†	679	684	690	679	659	647	652	655	655	665	657	659	661	659	656
30	665	672	671	654	629	609	622	635	667	685	697	701	701	698	695
Mean ‡ .	696	701	704	695	683	666	659	664	675	685	694	697	695	692	691
Mean† .	690	696	699	690	679	665	663	664	668	677	684	687	686	681	680

†Five international quiet days.

‡ Mean of 29 days.

§Loss of record due to faulty illumination, the day has been omitted for means.

MARCH.

(Averages for periods of sixty minutes centred at the full hours of Greenwich mean time.)
17000 γ PLUS TABULAR QUANTITIES.

Hours. (G. M. T.)									Mean.*	Maximum.		Minimum.		Date.
15	16	17	18	19	20	21	22	23		Time.	Mag.	Time.	Mag.	
γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H. M.	γ	H. M.	γ	
681	680	680	680	682	683	683	683	683	682	3 3	696	5 23	672	1
701	701	702	705	705	705	705	705	705	697	10 1	706	5 5	682	2†
705	705	706	708	708	708	708	707	706	706	3 39	720	12 28	702	3
700	701	701	702	703	703	703	702	702	700	2 29	714	7 7	679	4‡
697	696	697	698	699	698	699	698	698	698	2 33	708	7 19	685	5†
700	700	702	705	706	704	704	704	704	695	18 33	707	7 46	664	6
714	715	715	718	718	718	717	716	715	710	3 45	721	7 37	694	7
726	727	728	731	732	730	729	728	728	718	18 37	734	7 57	685	8
720	719	720	721	721	721	721	720	720	716	3 37	732	7 29	681	9†
706	706	708	709	709	709	709	707	706	703	2 41	723	7 37	672	10
711	709	708	715	713	711	707	707	703	702	15 24	717	8 34	676	11
695	696	695	697	698	698	695	696	693	696	2 47	709	8 1	652	12
700	699	700	699	700	699	695	696	695	695	4 4	706	7 49	680	13
674	674	675	677	677	673	672	671	670	676	2 5	700	7 25	658	14
672	674	675	675	674	675	675	674	676	676	4 45	695	7 41	659	15
676	676	674	675	675	674	674	672	671	676	3 27	693	7 43	665	16
669	669	672	672	672	671	668	666	667	669	2 59	690	7 1	651	17
666	665	667	669	670	668	668	668	668	667	4 57	682	12 13	650	18
678	677	678	681	682	682	680	679	679	676	3 41	693	11 41	663	19
679	680	680	681	682	681	679	678	679	679	4 39	692	12 9	668	20
673	676	678	679	679	677	677	675	675	673	3 57	687	7 41	650	21
676	675	677	678	679	678	677	676	676	671	2 53	683	5 18	643	22
691	694	697	700	701	701	700	699	699	694	20 37	702	6 5	645	23
690	691	693	695	696	695	694	693	693	691	2 51	710	6 35	663	24
694	691	693	695	697	696	696	696	695	688	2 13	702	6 51	655	25
694	694	696	699	698	697	697	696	697	693	2 57	701	7 17	674	26
685	686	689	689	690	690	690	689	689	686	2 57	702	7 25	664	27
680	681	682	684	685	685	683	683	683	683	2 17	701	5 47	661	28
677	677	679	681	682	681	682	682	682	678	2 39	696	6 37	651	29
684	683	683	686	687	686	686	686	687	683	2 9	698	5 45	656	30
689	689	691	693	693	693	693	693	693	688	1 51	705	5 33	655	31†
690	690	692	693	694	693	693	692	691	689					Mean
701	701	702	704	704	704	704	704	703	699					Mean†

APRIL.

694	696	697	698	698	697	696	695	695	689	1 45	706	8 17	648	1
689	689	691	693	694	693	692	691	691	687	1 59	706	8 39	649	2
685	685	685	688	685	684	685	686	685	682	10 13	712	5 45	625	3
689	692	693	695	694	693	693	691	692	681	11 3	696	6 29	633	4
688	689	691	691	692	692	691	691	691	681	1 51	708	5 19	637	5
696	697	701	703	705	705	705	704	703	690	1 50	707	5 45	661	6
699	701	704	704	706	706	705	705	702	695	1 25	709	6 19	657	7
701	704	705	707	709	709	708	707	706	699	2 1	715	6 29	660	8
701	705	706	708	707	708	707	708	706	699	2 5	720	5 43	659	9
692	695	698	699	699	697	696	696	695	692	2 23	719	6 25	652	10
6*1	683	685	685	686	685	684	683	683	681	1 57	700	6 24	661	11
688	691	693	696	698	698	698	697	696	688	11 9	701	5 43	660	12†
697	700	702	705	707	707	706	707	707	696	1 49	710	6 49	664	13†
709	711	712	714	715	714	712	711	711	706	1 47	721	6 59	677	14
708	709	711	714	715	715	714	711	711	705	1 39	723	5 49	676	15
706	709	713	713	712	712	710	711	709	704	1 43	718	6 21	662	16
693	696	695	695	696	695	695	695	695	691	1 49	713	5 15	662	17
690	692	693	694	695	694	693	693	693	688	2 13	702	6 41	658	18
694	697	699	699	700	700	699	700	699	684	1 25	703	5 5	636	19
699	699	692	693	694	693	691	689	689	691	1 51	713	6 33	660	20
723	712	713	718	719	718	721	717	710	700	14 9	724	5 25	651	21
714	715	718	717	717	717	716	714	714	706	11 12	719	6 53	683	22
697	699	700	700	699	699	698	698	698	697	1 26	717	6 19	675	23
692	693	694	694	694	694	693	692	691	694	1 49	710	6 3	672	24
693	696	698	700	701	702	701	700	701	693	1 45	709	6 31	661	25†
691	694	696	697	698	698	698	697	697	.	1 57	718	5 41	664	26§
684	686	688	687	687	687	688	687	689	687	1 17	711	6 21	664	27
671	673	673	674	674	674	673	673	673	676	1 9	702	5 51	663	28†
659	662	664	666	667	667	667	666	666	668	1 41	692	4 37	645	29†
697	700	703	707	708	708	708	708	710	682	23 57	711	4 59	608	30
694	695	697	699	699	699	698	697	697	691					Mean‡
682	684	686	688	689	689	689	689	689	683					Mean.†

*See footnote on page 113.
†Five international quiet days.
‡Mean of 29 days.
Loss of record due to faulty illumination, the day has been omitted for means.

MAY. (Averages for periods of sixty minutes centered at the full hours of Greenwich mean time.) 17000 γ PLUS TABULAR QUANTITIES.

Date.	Hours (G. M. T.)														
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1†	711	720	730	733	708	694	652	695	703	710	716	715	714	714	711
2†	722	731	734	724	698	675	675	681	690	699	709	710	722	718	715
3†	726	736	739	719	687	660	660	660	687	701	710	714	711	712	711
4	711	717	718	709	692	675	670	675	687	701	712	717	715	706	703
5	711	721	719	705	684	663	665	669	676	687	696	701	704	704	7 1
6	714	722	727	719	702	692	690	688	687	691	703	713	719	719	7 2
7	720	728	732	714	697	675	676	681	695	703	705	712	714	710	705
8	712	725	727	712	694	677	683	689	672	702	704	705	705	699	696
9	701	709	706	695	673	653	642	658	*673	687	690	698	684	681	680
10	692	694	690	680	663	653	660	669	681	687	687	689	685	683	685
11	687	698	694	671	653	648	625	649	647	669	692	705	710	706	703
12	715	724	726	719	708	692	680	676	683	700	7 3	721	723	725	715
13	722	730	735	724	707	690	679	686	690	703	711	718	718	718	716
14	731	733	725	712	707	704	699	703	714	726	727	724	720	721	7.0
15	725	731	728	712	687	678	676	679	688	702	712	717	716	712	709
16	729	725	720	713	676	664	673	687	693	701	708	714	713	707	704
17	721	729	727	719	707	693	693	696	692	698	704	705	700	706	706
18	717	727	729	717	698	671	661	666	677	692	698	691	697	702	704
19	718	722	721	714	7.1	703	698	4 94	689	712	724	730	731	731	730
20	73	743	741	733	721	708	700	698	701	709	716	722	721	716	711
21	719	726	723	713	682	666	663	661	665	674	684	691	693	690	687
22†	703	709	714	712	701	676	670	668	674	685	690	693	690	688	684
23	693	703	705	697	681	666	662	659	665	680	690	689	687	688	688
24	691	696	702	689	693	693	687	684	684	689	692	697	700	697	691
25	692	699	696	688	674	660	652	654	659	672	679	682	686	688	684
26†	687	692	695	699	678	665	667	6 3	662	673	675	687	690	686	678
27	685	690	690	673	652	638	648	657	692	713	726	745	753	750	746
28	762	774	765	749	730	720	726	738	745	755	760	764	767	765	764
29	763	761	753	742	721	718	716	716	718	727	734	739	739	739	738
30	774	778	774	758	710	694	688	687	695	703	711	716	714	713	709
31	716	725	725	715	702	681	679	676	681	685	690	701	702	699	695
Mean .	715	722	722	710	678	681	676	679	686	698	705	711	711	709	706
Mean† .	710	718	722	713	695	674	673	675	683	695	700	705	705	703	700

JUNE.

1	701	707	707	702	695	677	674	675	681	687	691	691	695	695	690
2	694	702	699	695	685	666	660	656	660	664	670	677	683	683	679
3	683	693	694	687	673	656	660	693	707	711	719	722	727	729	724
4	733	738	737	726	716	704	699	699	702	709	713	714	715	717	717
5	723	729	727	719	705	689	678	676	683	688	694	703	707	709	706
6	717	722	722	708	691	676	663	663	668	683	699	709	707	704	698
7	707	712	716	711	698	682	674	672	687	695	698	703	702	701	697
8	703	711	707	698	688	682	673	670	675	687	694	697	693	687	686
9	700	703	711	713	703	691	679	672	676	684	686	689	690	688	685
10†	691	695	701	695	686	671	663	657	659	661	661	671	678	681	681
11†	681	686	689	688	677	672	675	679	681	684	671	676	675	678	674
12	680	685	681	672	658	641	633	633	645	652	664	660	661	659	659
13	675	679	673	663	645	645	649	690	705	719	725	731	736	737	737
14	762	767	766	760	751	745	736	739	738	743	749	753	750	749	750
15	754	756	754	746	740	735	730	727	731	739	741	741	738	737	737
16†	743	748	745	737	729	718	708	705	705	714	722	721	726	722	721
17†	718	723	723	718	707	685	682	681	684	697	706	705	709	709	707
18	705	711	708	694	679	672	670	668	688	691	697	700	700	699	692
19	698	695	692	685	669	645	635	670	682	695	695	697	674	678	671
20	675	684	685	666	639	633	641	650	668	679	679	681	674	669	664
21	663	672	676	672	664	654	637	632	641	646	667	669	665	658	649
22	653	656	661	657	644	638	639	655	670	687	699	7 0	721	728	717
23	748	762	764	745	729	716	709	709	713	722	730	724	723	730	723
24	740	747	751	744	730	724	717	705	706	716	725	7.1	720	725	728
25	732	733	737	742	736	716	703	704	708	712	716	724	728	730	725
26	725	734	733	721	709	695	687	685	688	687	687	691	701	707	704
27†	713	718	708	694	689	684	670	660	669	678	683	692	687	686	686
28	703	711	709	702	694	681	663	660	662	679	692	702	703	699	689
29	695	708	714	698	647	642	634	634	655	666	671	679	687	686	686
30	707	717	721	717	705	696	685	682	681	683	684	691	693	699	698
Mean .	707	713	713	706	693	681	675	676	683	690	696	701	703	703	700
Mean† .	709	714	713	706	698	686	678	678	676	683	689	693	696	698	696

†Five international quiet days.

MAY.

(Averages for periods of sixty minutes centered at the full hours of Greenwich mean time.)
17000 γ PLUS TABULAR QUANTITIES.

Hours (G. M. T.)									Mean.*	Maximum.		Minimum.		Date.
15	16	17	18	19	20	21	22	23		Time.	Mag.	Time.	Mag.	
γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H. M.	γ	H. M.	γ	
711	714	717	719	721	721	720	718	719	713	2 1	731	6 17	690	1†
717	722	724	725	725	725	723	723	725	713	1 45	735	5 21	673	2†
714	716	720	719	718	718	717	718	718	708	1 37	742	5 1	658	3†
707	709	711	712	712	713	713	712	712	705	1 29	721	5 50	689	4
705	709	714	717	716	715	713	711	712	701	1 33	724	5 45	660	5
712	715	717	718	718	718	717	716	716	710	1 41	729	8 27	685	6
708	711	714	714	715	715	715	714	714	707	1 57	734	4 49	673	7
697	702	703	703	703	702	701	701	701	699	1 35	731	6 13	660	8
684	686	689	691	692	692	691	690	691	685	1 25	711	5 42	647	9
685	688	692	693	693	691	692	693	690	683	0 57	695	4 39	652	10
707	710	709	708	714	715	717	717	716	689	22 33	720	5 41	621	11
711	716	718	719	718	717	717	712	710	711	1 45	729	3 57	674	12
719	723	726	727	726	727	728	729	728	716	1 49	737	5 59	677	13
720	723	722	722	724	724	723	724	725	720	0 57	736	6 15	687	14
711	713	714	713	713	713	715	715	716	708	1 11	733	6 34	675	15
709	713	712	711	712	714	714	712	712	705	1 15	727	5 12	662	16
708	709	711	711	712	711	710	709	710	708	1 8	732	5 37	688	17
705	704	707	707	708	706	704	703	704	699	1 27	731	5 55	660	18
731	732	734	734	732	732	730	729	729	722	18 21	735	7 1	693	19
711	713	715	716	717	716	714	712	712	716	1 41	744	6 37	677	20
689	692	696	697	697	696	696	695	694	691	1 0	727	6 45	669	21
684	684	685	687	687	687	686	685	686	688	2 25	715	7 1	667	22†
688	689	690	691	692	692	691	690	690	686	2 1	706	6 57	658	23
691	693	695	695	694	694	692	692	691	693	1 49	703	6 39	683	24
685	686	689	691	691	692	690	690	691	682	1 19	702	6 22	647	25
679	681	683	683	684	684	685	686	686	681	1 49	697	7 45	659	26†
748	759	763	763	764	763	761	760	761	723	17 13	769	4 37	633	27
737	755	753	754	759	761	759	757	753	753	1 0	778	12 9	711	28
738	736	741	742	742	737	737	739	739	736	0 42	768	6 24	714	29
710	703	727	717	717	717	717	717	717	713	0 57	740	6 35	682	30
697	700	702	702	705	705	705	704	705	700	1 33	729	7 13	673	31
708	710	713	713	713	713	713	712	712	705					Mean.
701	703	705	707	707	707	707	706	707	701					Mean.†

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689	693	698	701	698	700	700	698	699	693	1 57	710	6 39	672	1
678	681	684	684	683	679	680	680	679	676	1 17	703	6 55	655	2
726	729	729	729	729	727	727	726	726	712	17 15	730	4 41	661	3
719	718	720	719	719	719	718	717	716	717	0 44	741	6 21	697	4
707	708	712	712	715	714	712	709	709	705	1 25	732	6 57	673	5
700	703	705	706	705	704	704	701	700	698	1 35	726	6 21	660	6
700	699	701	699	699	699	699	698	698	698	2 21	716	6 48	669	7
685	689	692	694	694	694	693	693	693	691	0 52	713	6 33	667	8
685	688	691	692	693	692	691	690	690	691	2 39	717	7 21	670	9
679	679	681	682	683	683	681	681	680	678	1 59	703	7 5	656	10†
674	676	678	680	680	679	677	678	677	675	2 27	690	7 9	658	11†
662	664	666	667	669	668	670	668	667	681	1 11	686	6 1	628	12
741	744	750	753	756	756	756	757	759	718	22 19	761	4 41	633	13
748	749	751	753	754	753	753	753	752	751	1 6	770	6 21	734	14
736	738	739	740	740	740	739	739	739	740	1 27	757	7 1	726	15
719	721	721	721	721	721	721	720	720	732	0 49	750	7 35	703	16†
706	705	707	708	708	708	707	707	707	709	1 41	724	6 37	680	17†
690	692	692	693	694	692	690	691	691	692	1 21	713	5 57	668	18
671	672	673	675	676	676	676	674	673	671	1 7	697	6 1	634	19
663	665	668	670	668	667	667	667	666	666	1 19	687	4 45	629	20
650	653	654	654	654	654	654	653	654	656	1 55	680	6 53	623	21
722	727	740	742	743	743	743	747	745	702	23 53	748	4 39	653	22
734	736	738	741	742	743	743	743	742	733	2 20	758	7 13	707	23
725	726	729	732	732	732	732	733	734	729	2 11	753	6 55	703	24
725	725	729	731	732	732	731	732	731	725	2 57	744	6 33	701	25
703	706	706	708	710	709	710	709	710	705	1 21	737	6 15	683	26
692	695	698	699	701	700	698	699	699	693	0 41	719	6 47	655	27†
689	689	691	693	694	693	692	690	691	690	1 9	713	7 18	657	28
689	693	696	697	698	700	698	698	699	684	1 59	717	5 27	633	29
700	705	706	707	709	709	708	709	709	701	1 33	722	7 55	680	30
700	702	705	706	707	706	706	705	705	699					Mean.
694	695	697	698	699	698	697	697	697	695					Mean.†

*See footnote on page 113.

†Five international quiet days.

JULY.

(Averages for Periods of sixty minutes centered at the full hours of Greenwich mean time.)

17000 γ PLUS TABULAR QUANTITIES.

Date.	Hours. (G. M. T.)														
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	714	720	719	703	696	681	675	679	685	690	699	702	705	707	705
2	716	724	719	711	703	694	680	683	690	692	705	709	708	707	704
3	709	715	714	710	702	689	684	681	681	686	693	697	700	700	694
4	700	707	710	711	690	663	665	662	664	664	674	681	690	684	681
5	694	699	699	687	673	652	645	647	665	680	687	688	685	682	677
6	685	690	684	673	659	635	625	623	646	668	689	700	704	700	690
7	709	716	715	695	684	675	669	669	672	683	691	695	700	705	702
8	721	735	725	709	700	721	712	681	683	686	686	718	718	721	722
9	728	735	730	719	711	690	681	683	690	697	704	712	713	719	720
10	718	721	720	710	700	686	672	668	671	675	677	679	687	702	701
11	696	701	703	701	690	679	667	669	683	686	688	683	680	682	683
12	683	686	688	680	675	668	649	651	664	655	663	667	671	670	668
13†	672	677	678	671	656	636	622	627	634	636	655	656	666	659	649
14	652	668	669	651	639	619	636	664	684	694	702	711	715	708	701
15†	719	737	737	728	712	695	690	697	706	713	722	727	727	722	714
16†	727	735	732	718	711	702	709	697	699	691	697	707	711	720	717
17†	724	730	733	730	723	709	688	696	704	714	720	723	721	720	719
18	732	740	725	704	696	703	707	715	724	723	719	720	721	721	718
19	728	735	733	724	714	695	686	688	699	709	717	721	717	710	706
20†	719	726	721	721	711	699	687	685	697	698	702	710	712	708	702
21	717	722	722	721	712	696	677	673	675	677	683	691	696	695	690
22	712	714	715	708	698	683	680	680	681	684	690	693	692	696	695
23	709	710	709	698	697	676	667	662	660	678	690	693	688	685	682
24	694	694	691	684	685	683	679	679	683	695	699	690	691	687	683
25	702	706	699	688	679	676	671	677	686	693	693	692	690	687	686
26	697	700	695	686	675	663	652	659	682	692	687	684	680	679	680
27§	695	703	702	692	675	651	642	636	655	668	679	678	667	662	663
28	687	694	691	676	655	640	637	630	646	661	680	693	696	702	705
29	722	725	730	723	711	694	691	694	702	711	716	716	716	717	719
30	731	730	729	718	702	689	685	693	704	716	719	711	707	712	713
31	729	738	737	725	713	702	695	703	713	720	726	733	732	727	721
Mean‡	708	715	713	705	694	679	673	674	682	689	696	700	701	701	698
Mean†	712	721	721	713	703	688	680	681	689	691	699	705	707	704	699

AUGUST.

1	731	739	732	713	691	680	678	683	689	704	710	719	720	718	713
2	720	724	729	726	713	692	685	682	691	709	715	715	715	713	704
3†	712	720	716	701	687	672	675	681	693	701	700	697	695	695	697
4	708	713	718	712	700	687	678	678	689	698	704	708	706	699	695
5	703	706	704	701	696	687	679	681	690	705	705	710	709	715	715
6	729	731	727	721	712	703	691	685	686	688	707	720	719	713	706
7	716	725	728	725	712	694	703	705	708	713	719	719	714	713	711
8	721	726	725	715	696	677	665	665	674	689	701	713	718	711	705
9	711	715	709	695	683	659	657	667	677	686	688	690	692	695	694
10†	699	703	700	683	666	676	680	685	681	682	683	683	685	684	677
11	688	692	691	683	678	668	667	668	670	672	667	686	688	689	686
12	680	684	683	679	670	659	659	670	679	689	704	711	710	704	701
13	723	729	723	713	700	692	699	706	714	720	718	716	715	714	712
14†	726	734	729	714	702	688	683	688	697	711	716	717	715	715	713
15†	723	732	723	723	704	684	683	689	695	709	719	726	721	714	709
16	716	723	719	705	691	674	666	667	671	681	690	703	710	709	704
17	706	714	715	710	698	680	673	664	671	676	681	690	696	695	691
18	698	707	709	698	670	637	631	646	664	674	683	685	684	683	682
19	693	699	700	689	675	663	665	665	669	682	693	702	705	708	698
20‖	711	717	719	710	706	693	691	697	703	710	713	713	712	713	712
21	726	731	736	725	711	689	687	686	698	712	721	722	719	715	713
22†	717	723	729	733	714	707	706	710	714	722	731	733	730	718	711
23	708	711	712	698	686	667	667	684	671	683	689	693	694	690	688
24	690	696	697	691	683	674	665	671	680	689	694	693	689	682	680
25	686	692	693	684	659	629	617	620	643	660	662	661	657	655	655
26	666	670	673	656	657	648	652	664	678	691	695	695	701	704	698
27	731	731	730	719	698	688	687	699	695	699	701	716	716	717	714
28	725	732	728	707	685	673	676	681	686	695	701	702	705	707	705
29	719	724	718	699	687	675	675	682	691	701	705	702	696	697	698
30	702	708	703	694	684	667	660	665	676	687	690	689	689	684	685
31	688	692	692	679	652	643	660	666	677	696	705	708	701	691	692
Mean‡	708	714	713	703	689	674	672	676	684	694	700	703	703	701	698
Mean†	716	722	722	711	699	685	685	691	698	705	710	711	709	705	701

†Five international quiet days.

‡Mean of 30 days.

‖ Loss of record due to stoppage of driving clock. The day has been omitted for means.

§ Clock under cleaning. Eye readings at full hours substituted. The day has been omitted for means.

JULY.

(Averages for periods of sixty minutes centered at the full hours of Greenwich mean time.)
17000 γ PLUS TABULAR QUANTITIES

Hours, (G. M. T.)									Mean.*	Maximum.			Minimum.			Date.
15	16	17	18	19	20	21	22	23		Time.		Mag.	Time.		Mag.	
γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H.	M.	γ	H.	M.	γ	
705	708	709	711	711	710	710	710	710	703	1	21	723	5	57	679	1
700	706	712	714	713	714	712	711	709	705	1	11	725	6	19	677	2
694	698	702	702	701	701	701	700	700	693	1	29	717	7	17	679	3
682	687	689	691	692	691	691	689	691	684	1	11	714	7	37	651	4
677	679	681	682	683	683	683	682	681	679	1	45	701	5	45	642	5
691	696	701	702	705	705	705	703	703	683	12	39	706	7	17	618	6
701	705	707	709	709	712	715	712	712	699	1	9	720	6	19	667	7
725	721	732	732	730	733	730	727	725	720	3	13	770	7	17	654	8
716	716	715	717	719	719	720	719	719	713	1	17	737	6	29	677	9
698	699	700	702	702	703	705	703	703	695	1	41	724	6	47	666	10
682	683	684	685	687	686	685	686	685	685	1	49	705	6	35	664	11
667	667	667	668	668	670	669	670	671	668	1	33	689	6	27	648	12
651	653	654	653	655	656	656	657	657	653	1	46	679	6	13	621	13†
703	707	710	712	712	713	716	717	718	689	11	45	717	5	1	615	14
715	718	721	720	722	723	723	724	726	718	1	49	738	6	1	688	15†
717	719	723	724	724	724	724	726	726	715	1	31	736	9	15	689	16†
719	723	724	724	725	7 8	728	729	728	721	2	23	734	7	5	695	17†
717	720	722	722	722	720	721	720	723	719	1	1	741	3	59	695	18
709	712	713	715	716	716	716	715	715	713	1	19	736	6	27	683	19
702	705	708	709	709	709	710	707	707	707	1	37	729	6	37	680	20†
700	702	706	709	710	710	709	707	707	701	1	21	725	6	37	671	21
699	702	704	705	706	706	708	705	702	698	0	51	720	6	24	677	22
680	681	683	684	684	686	686	686	685	686	0	57	711	7	9	659	23
688	692	693	694	696	696	695	695	693	690	9	53	702	6	33	677	24
687	689	692	694	695	694	692	691	691	689	1	13	708	5	41	664	25
683	684	687	689	690	689	689	689	689	684	1	25	701	5	29	661	26
669	674	675	676	679	679	680	681	681	..	..	..	..	..	..	..	27§
704	708	711	714	713	716	718	716	717	689	23	17	719	6	41	638	28
714	717	719	723	724	724	724	725	725	717	1	21	739	6	34	658	29
715	717	718	721	723	723	722	721	722	714	1	3	741	6	1	684	30
723	724	728	729	728	730	731	729	729	723	1	31	741	5	41	693	31
699	701	704	705	706	706	706	706	705	699							Mean.‡
701	704	706	706	707	708	708	708	709	703							Mean.†

AUGUST.

714	718	720	722	722	721	721	719	720	712	1	3	742	5	47	676	1
705	707	710	712	712	712	711	710	711	709	1	49	730	6	39	678	2
700	702	704	706	706	706	705	704	704	699	1	21	722	5	25	671	3†
695	698	698	701	703	704	704	703	700	700	1	53	719	6	53	675	4
716	720	724	726	728	732	732	730	725	711	22	13	738	6	23	676	5
710	712	712	714	717	716	716	714	713	711	11	13	734	7	53	684	6
714	716	717	719	721	721	721	720	721	715	1	27	732	5	3	691	7
705	705	708	710	712	712	712	712	713	704	1	25	726	6	37	663	8
693	694	696	696	697	698	699	698	699	691	1	5	716	5	33	654	9
679	680	683	683	684	686	688	687	687	685	1	29	704	5	25	676	10†
669	672	676	677	678	680	679	679	678	675	1	12	694	11	5	665	11
703	707	712	712	712	714	716	718	719	697	22	49	720	5	41	656	12
713	715	717	718	719	719	719	722	722	715	1	3	731	4	59	691	13
716	719	721	722	721	722	723	724	724	714	0	13	735	6	9	684	14†
710	712	714	714	715	716	716	715	716	712	1	43	739	5	45	679	15†
703	703	705	707	708	708	708	708	708	699	1	5	725	5	57	665	16
692	695	696	698	698	697	697	697	697	693	1	43	717	7	1	663	17
683	686	688	690	690	689	689	689	690	681	1	41	711	6	29	629	18
700	703	705	707	708	709	709	708	708	695	12	11	710	4	57	658	19
712	715	716	717	717	717	..	..	..	..	1	41	721	5	25	685	20‖
715	718	719	721	720	720	719	718	718	715	2	13	737	5	11	684	21
708	711	711	710	711	712	712	711	710	716	11	21	734	5	25	705	22†
688	691	692	693	694	694	693	692	692	689	1	38	714	5	49	663	23
678	681	682	683	685	684	683	683	682	684	1	41	700	6	21	662	24
658	659	661	662	663	664	664	663	664	659	2	1	695	6	19	614	25
703	712	714	718	719	719	721	724	721	693	22	23	726	5	59	646	26
717	720	723	725	726	725	724	723	722	714	1	55	737	6	5	683	27
709	711	715	715	718	716	715	715	715	708	1	7	735	5	3	670	28
706	703	703	704	706	706	707	707	707	700	1	7	725	5	25	673	29
697	698	691	692	694	695	695	694	693	688	1	4	711	6	49	658	30
693	695	698	702	703	702	701	703	702	689	10	58	709	4	33	640	31
699	702	704	705	706	707	707	708	706	699							Mean.‡
703	705	706	707	707	708	709	708	708	705							Mean.†

*See footnote on page 113.
†Five international quiet days.
‡ Mean of 30 days.
‖Loss of record due to stoppage of driving clock. The day has been omitted for means.
§ Clock under cleaning. Eye readings at full hours substituted. The day has been omitted for means.

(Averages for periods of sixty minutes centered at the full hours of Greenwich mean time.)

SEPTEMBER. 17000 γ PLUS TABULAR QUANTITIES.

Date.	Hours (G. M. T.)														
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	704	712	717	712	693	673	660	677	680	696	705	709	705	697	697
2	709	714	711	698	685	673	669	670	679	683	691	703	709	705	700
3	708	715	719	711	692	676	664	669	674	686	700	710	710	708	709
4	716	723	723	719	707	688	681	685	695	699	710	718	717	712	711
5	714	720	727	716	695	679	670	689	699	711	718	720	715	709	705
6	713	719	717	710	701	684	680	675	680	688	701	707	708	703	701
7	708	715	716	708	694	677	668	659	663	674	682	687	687	690	699
8	705	713	709	693	675	664	655	671	684	699	710	715	714	706	705
9	719	727	722	702	681	660	653	659	674	693	707	712	708	704	706
10	719	728	725	710	690	682	687	688	696	711	718	716	706	699	703
11	713	716	712	691	671	658	653	665	676	692	709	713	704	694	696
12†	704	712	713	701	685	671	663	685	674	685	692	694	694	684	688
13	690	698	701	689	676	665	654	655	665	676	685	682	675	673	678
14	681	687	690	683	663	651	651	657	673	689	697	695	694	696	701
15	715	721	724	715	703	697	688	690	697	709	718	721	719	715	715
16†	723	733	742	737	718	693	686	685	695	705	723	726	721	716	716
17†	725	733	741	734	710	681	668	670	687	706	721	723	717	713	715
18	724	732	737	721	706	687	674	676	688	702	713	710	702	702	705
19	714	717	721	703	678	662	651	652	657	671	696	703	703	701	700
20	708	713	712	704	684	667	674	670	675	687	697	696	694	687	689
21†	696	703	704	693	681	665	663	650	662	675	679	678	675	672	675
22	688	697	701	695	675	657	648	647	665	688	701	702	697	697	699
23	715	722	726	715	698	687	68.	677	683	697	707	706	701	703	708
24	720	724	732	729	713	701	691	694	705	715	716	706	701	704	711
25	724	725	729	731	715	694	689	684	697	713	721	716	710	709	714
26	721	729	731	709	680	657	649	664	685	702	709	704	694	694	703
27	709	714	715	698	675	660	657	660	675	696	702	699	689	689	695
28†	702	707	706	689	668	635	640	652	669	696	701	701	696	696	702
29	717	720	721	708	684	669	670	682	691	701	707	705	703	705	710
30	717	721	726	725	727	701	691	691	703	709	709	709	705	705	707
Mean . .	711	717	719	708	691	675	669	671	682	695	705	706	702	700	702
Mean† . .	710	717	721	711	693	689	662	664	677	693	703	704	699	697	699

OCTOBER.

1	714	719	725	721	700	679	663	668	691	711	720	721	709	702	705
2	711	718	725	720	704	676	666	668	692	711	713	712	706	699	703
3	719	730	735	726	711	692	666	681	702	718	728	721	708	709	716
4	723	728	733	722	713	696	689	693	702	712	717	713	704	705	709
5	712	714	717	711	697	679	676	680	691	698	701	701	701	699	702
6	707	713	706	691	678	668	674	689	698	707	709	708	702	702	703
7	711	719	716	710	703	689	682	678	685	696	705	708	702	701	705
8	712	721	723	711	695	685	686	692	706	712	711	706	701	706	707
9†	712	716	710	697	688	682	686	692	703	712	714	703	699	701	704
10†	719	715	704	682	672	662	653	671	685	694	698	694	684	690	696
11†	705	708	710	701	690	674	670	672	682	688	693	688	684	688	694
12	701	701	699	689	679	675	679	688	706	714	717	709	701	704	711
13	726	727	727	713	700	693	700	708	715	721	726	723	714	711	719
14	720	722	723	721	711	687	683	692	709	720	730	726	716	693	704
15	711	717	720	711	692	675	667	676	685	688	691	694	691	690	694
16	688	689	693	690	682	675	665	666	673	677	677	672	667	667	673
17	675	678	679	671	664	650	651	654	658	665	667	663	659	662	668
18	672	676	677	671	656	639	633	643	650	670	662	663	661	663	669
19	678	674	664	650	655	640	657	673	705	708	713	713	716	722	726
20	750	756	759	751	742	731	728	732	737	742	745	744	739	739	743
21	743	745	751	746	737	721	715	724	729	732	737	737	732	733	737
22	740	745	746	742	731	717	712	723	743	748	749	750	740	739	743
23†	741	743	747	742	730	708	709	707	717	721	723	721	716	718	720
24	718	717	720	716	707	696	682	683	695	698	696	695	691	693	695
25	685	692	695	690	680	678	679	676	682	679	678	676	676	678	680
26	682	676	677	671	665	660	660	661	678	670	664	660	658	662	665
27	666	668	669	666	660	653	670	670	667	662	657	654	650	653	663
28†	666	668	671	662	657	644	654	658	662	661	658	657	652	654	658
29	656	657	660	653	653	662	674	688	710	717	719	723	721	724	733
30	735	735	737	741	736	718	715	715	719	724	727	726	725	726	729
31	725	725	726	729	731	724	719	723	727	730	730	727	725	727	728
Mean . .	706	710	711	705	695	683	680	686	697	703	705	703	697	699	703
Mean† . .	707	711	711	699	687	676	673	680	690	695	697	694	687	690	694

†Five international quiet days.

SEPTEMBER. (Averages for periods of sixty minutes centered at the full hours of Greenwich mean time.) 17000 γ PLUS TABULAR QUANTITIES.

Hours (G. M. T.)								Mean.*	Maximum.			Minimum.			Date.
15	16	17	18	19	20	21	22	23		Time.	Mag.	Time.	Mag.		
γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H. M.	γ	H. M.	γ		
700	702	705	707	707	707	707	708	708	701	1 49	719	4 57	670		1
702	705	707	707	708	708	708	707	707	698	1 43	715	6 17	667		2
711	713	715	715	716	716	715	714	714	703	1 45	720	5 48	661		3
711	713	713	714	716	716	715	714	713	709	1 35	724	6 35	679		4
707	707	708	710	710	708	709	709	709	707	1 55	728	5 9	676		5
701	701	706	707	706	705	705	706	706	701	1 13	722	6 57	674		6
697	691	693	695	700	701	699	699	701	692	1 29	718	7 23	657		7
710	710	709	711	711	711	711	715	717	702	1 17	736	5 29	681		8
710	709	710	711	711	711	713	714	714	701	1 9	733	6 9	649		9
702	702	705	707	710	711	711	711	710	706	1 31	731	5 33	681		10
697	700	704	704	705	705	707	706	706	696	1 7	718	6 46	661		11
691	691	691	691	692	692	692	690	690	683	1 37	717	6 19	661		12†
680	683	681	684	684	684	684	681	680	679	1 45	704	6 5	652		13
707	707	710	712	713	713	712	712	712	692	23 29	713	4 21	630		14
718	718	720	720	721	721	720	720	720	714	1 33	736	6 17	682		15
718	719	721	723	723	723	722	722	722	717	2 1	748	6 39	683		16†
716	717	719	721	722	722	722	721	720	713	1 55	742	6 19	665		17†
703	708	713	713	713	717	718	715	715	708	1 49	739	6 29	669		18
703	705	710	709	708	708	707	707	707	696	1 41	725	7 29	649		19
690	691	693	695	697	697	697	697	696	693	1 39	715	7 11	669		20
676	678	679	681	682	682	682	682	682	678	1 51	707	6 35	647		21†
701	701	708	710	711	712	712	711	711	694	20 1	715	6 46	643		22
711	710	713	715	716	718	717	717	715	707	1 37	723	7 1	676		23
713	713	717	721	722	721	721	722	723	714	2 25	736	6 29	687		24
715	717	716	720	722	721	718	721	725	714	2 47	738	6 43	677		25
703	707	708	710	709	709	710	710	711	700	1 46	734	5 27	646		26
698	699	701	702	702	703	703	702	702	693	1 35	719	6 1	654		27
703	707	712	715	715	716	716	715	717	695	23 33	718	5 11	632		28†
710	713	715	716	717	717	717	717	717	706	2 1	723	5 25	667		29
707	709	711	713	714	714	713	712	713	710	2 17	729	6 43	686		30
704	705	707	709	709	710	709	709	709	701						Mean.
701	703	704	706	707	707	707	706	706	699						Mean†.

OCTOBER.

707	709	709	712	713	713	712	712	711	706	2 9	726	6 33	659		1
707	713	718	717	716	719	719	719	719	707	2 18	726	6 29	663		2
720	720	719	722	722	723	723	722	722	715	1 39	737	5 43	664		3
709	710	711	713	713	713	712	712	712	711	1 31	725	6 29	688		4
705	703	704	706	704	702	703	704	704	701	2 2	719	5 13	673		5
704	705	703	707	707	707	707	709	709	701	1 4	714	4 50	666		6
707	708	709	710	709	710	709	708	709	704	2 16	726	6 46	676		7
708	707	707	708	709	709	708	708	708	706	1 27	725	6 37	684		8
705	704	705	706	706	706	707	706	705	703	1 4	718	4 45	681		9†
697	697	699	701	701	701	701	700	701	693	1 29	721	5 49	639		10†
693	695	697	700	699	700	698	698	698	693	1 37	713	6 31	668		11†
712	712	714	717	718	717	716	716	716	705	9 47	719	6 13	673		12
719	719	721	722	720	721	721	717	718	717	1 45	729	5 14	694		13
706	705	705	706	707	707	707	706	707	707	1 47	725	6 19	681		14
694	696	698	700	699	697	697	695	695	694	1 47	722	5 41	668		15
674	674	677	679	680	679	680	678	678	677	1 59	694	6 39	662		16
669	669	671	671	672	670	668	667	669	666	1 39	680	5 23	649		17
670	678	685	678	675	680	677	687	675	667	17 14	693	8 34	625		18
731	737	741	743	748	748	748	746	747	709	23 50	753	4 57	637		19
740	739	742	745	744	744	743	741	741	742	1 53	761	7 4	727		20
736	735	737	739	739	739	740	740	739	736	1 35	753	5 51	714		21
743	743	745	748	748	749	746	745	744	745	3 43	754	12 1	731		22
718	718	720	722	722	722	722	721	718	717	22 2	748	6 33	698		23†
644	646	649	649	649	649	647	644	644	641	1 57	732	6 37	676		24
679	680	680	683	683	683	681	675	674	681	0 55	699	16 54	670		25
665	667	669	669	670	669	669	666	666	667	1 40	683	12 9	657		26
663	666	667	669	670	668	667	666	667	665	7 11	676	5 10	661		27
658	659	663	663	661	660	660	659	659	659	2 11	672	12 31	650		28†
737	740	744	743	747	747	747	746	747	713	23 19	748	0 33	655		29
731	733	737	738	738	739	739	737	738	730	3 31	743	6 37	714		30
728	729	731	734	734	734	735	732	731	729	20 47	737	5 45	717		31
704	705	708	709	709	709	708	707	707	702						Mean.
694	695	697	698	698	698	697	696	696	694						Mean†.

* See footnote on page 113.
† Five international quiet days.

NOVEMBER. (Averages for periods of sixty minutes centered at the full hours of Greenwich mean time.) 17000 γ + LUS TABULAR QUANTITIES

Date.	Hours. (G. M. T.)														
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	724	727	729	726	718	715	713	719	723	722	721	717	717	719	721
2	716	718	719	716	710	707	704	717	717	7 8	717	716	717	722	727
3	7 8	713	712	714	708	696	696	701	704	704	705	706	706	707	704
4	706	708	7 9	707	702	69:	690	696	698	694	694	692	704	701	701
5	701	704	705	705	699	700	686	689	692	690	690	688	685	688	6 0
6	687	688	690	692	689	687	692	698	702	707	709	712	716	71<	720
7	722	722	722	722	718	726	727	726	730	727	727	727	725	725	7:6
8†	730	732	733	724	724	712	710	727	731	733	731	7 8	717	721	724
9†	728	7 0	732	726	716	71<	714	725	726	726	7 3	722	716	720	724
10	7 3	722	723	72<	712	706	707	710	715	712	713	714	716	717	7 0
11	728	728	731	723	728	71<	706	711	7 6	716	7 8	702	701	707	710
12	715	719	724	7 6	726	710	699	706	714	710	706	705	704	707	711
13	716	717	720	717	707	69<	697	707	709	702	704	7 3	706	713	7:8
14	722	720	715	718	717	711	712	717	718	718	712	711	708	709	712
15	72<	717	714	712	705	692	697	701	711	705	703	701	699	700	701
16	705	704	702	699	697	681	681	689	693	69<	703	6 9	695	694	697
17	699	698	699	703	701	689	678	6:4	691	692	695	687	686	687	691
18	693	695	695	694	692	692	687	6 9	692	6 0	688	688	688	688	689
19	690	691	692	696	692	685	677	693	691	695	695	702	701	702	706
20	7:4	713	716	716	709	7 3	707	711	713	713	715	713	711	713	715
21	716	716	717	72<	721	718	707	705	711	7 0	707	708	712	714	715
22†	717	717	715	713	706	6 9	705	714	719	7 0	718	718	719	719	719
23	717	718	718	7 0	721	727	73	728	722	718	717	719	722	722	722
24	715	715	715	714	711	710	7 3	717	719	712	710	707	708	712	711
25	710	708	710	715	717	717	717	722	7:4	7:4	705	705	709	711	7:2
26	705	706	705	706	7:3	697	698	703	7:5	706	705	706	703	708	709
27	707	707	707	706	707	7:1	715	718	717	717	7:5	713	715	717	716
28†	717	717	717	717	717	713	7:1	714	718	717	715	713	714	717	719
29†	719	718	720	725	722	717	720	719	717	716	715	716	715	714	715
30	718	717	716	716	712	709	705	707	708	708	709	712	710	707	708
Mean	713	713	714	714	711	705	704	709	711	710	709	709	708	710	712
Mean†	722	723	723	721	717	711	713	720	723	722	721	719	716	718	7:0

DECEMBER.

1	715	716	713	723	723	719	714	710	709	711	713	712	708	710	715
2	717	718	715	722	724	723	716	711	711	711	714	716	714	712	714
3	713	714	718	721	711	694	689	691	6:0	710	715	714	710	712	713
4†	713	714	714	718	712	696	694	697	702	709	712	710	706	705	705
5	701	699	698	701	697	6:4	697	695	698	711	716	718	711	711	714
6	716	717	716	722	729	734	728	722	721	717	717	721	717	7:0	719
7	719	720	720	726	7 5	713	705	707	711	709	706	713	716	717	719
8	721	721	716	717	719	718	715	716	717	719	717	713	712	716	720
9	719	719	719	722	720	709	708	714	717	713	711	712	712	711	715
10	715	717	716	718	717	708	702	699	702	705	704	704	701	705	709
11	710	710	713	714	715	711	715	716	717	719	715	714	710	709	712
12	714	713	710	715	717	718	720	722	725	723	719	715	716	717	719
13	724	723	7:3	724	719	717	715	723	724	7:3	719	720	720	7:2	723
14	730	730	728	733	734	728	721	722	730	733	731	731	722	725	728
15	722	25	7:3	723	721	717	715	711	711	716	720	723	721	722	723
16	719	717	717	724	731	7:4	713	705	706	70<	711	714	713	712	715
17†	713	711	713	719	716	712	712	710	71<	710	715	716	715	715	719
18	714	717	721	726	726	715	709	705	703	700	702	711	714	713	716
19†	718	718	719	724	723	718	710	704	703	704	705	711	716	719	7:4
20†	724	725	729	736	732	716	711	712	716	72<	723	728	728	731	734
21	731	731	735	7 9	734	719	707	717	728	729	733	731	730	731	734
22	735	735	740	742	737	731	729	723	710	724	730	734	731	736	736
23†	730	730	733	746	736	721	708	711	719	723	728	732	734	739	745
24	745	745	746	751	750	737	731	737	749	749	746	745	743	742	744
25	747	748	755	752	7 6	73<	727	734	741	734	731	735	738	738	7:8
26	728	728	730	739	743	7 9	726	732	732	7:8	713	7 8	723	724	723
27	714	714	713	723	727	710	693	699	705	703	702	702	698	697	699
28	694	693	694	697	691	675	683	680	687	688	685	678	674	680	683
29	679	678	680	686	673	656	6:3	658	667	679	673	672	668	667	669
30	666	666	667	673	665	646	644	645	651	651	655	658	653	653	657
31	669	669	673	680	677	672	674	690	706	715	724	731	736	737	744
Mean	715	716	716	721	719	711	706	707	711	712	713	714	713	715	717
Mean†	719	720	721	727	724	713	707	707	710	713	717	719	720	722	725

†Five international quiet days.

NOVEMBER. (Averages for periods of sixty minutes centered at the full hours of Greenwich mean time.) 17000 γ PLUS TABULAR QUANTITIES.

Hours (G. M. T.)								Mean.*	Maximum.		Minimum.		Date.
15	16	17	18	19	20	21	22	23	Time.	Mag.	Time.	Mag.	
γ	γ	γ	γ	γ	γ	γ	γ	γ	H. M.	γ	H. M	γ	
720	721	725	726	727	727	725	724	724	722	19 45	721	5 53	712	1
720	723	729	729	727	728	728	727	726	720	17 35	725	5 37	698	2
703	709	711	708	710	713	711	711	711	707	3 7	716	5 17	703	3
703	706	708	706	704	704	705	7 5	705	702	17 13	711	6 15	689	4
690	6 0	692	693	692	691	691	691	692	693	2 33	706	5 49	684	5
719	720	725	727	727	726	728	726	727	716	20 41	729	4 33	685	6
725	727	727	728	729	729	729	730	730	726	23 51	731	2 41	717	7
724	724	726	727	728	727	727	727	726	726	1 41	734	4 12	710	8†
723	722	725	727	727	726	724	722	723	723	1 49	732	5 48	711	9†
717	719	725	726	727	727	727	727	726	719	23 25	728	5 18	705	10
709	711	713	713	714	713	715	713	713	715	2 53	734	12 21	698	11
711	712	715	715	715	715	715	713	712	713	2 35	727	5 39	698	12
716	720	723	722	723	720	719	719	718	723	18 3	727	5 23	692	13
712	715	714	716	716	716	715	714	713	712	0 47	723	11 35	704	14
705	705	707	710	709	710	710	706	704	706	0 0	721	5 17	690	15
697	699	701	702	702	704	704	704	701	698	0 27	709	5 23	678	16
692	691	696	695	695	696	6 6	697	695	693	2 31	706	6 1	676	17
687	689	690	692	692	690	691	690	689	690	0 59	696	6 13	685	18
707	707	710	713	713	713	714	714	714	701	0 0	717	6 13	678	19
714	715	718	719	719	7 0	7 0	720	720	713	23 13	721	6 3	702	20
716	715	719	718	718	719	719	719	718	715	3 27	722	6 37	703	21
719	720	720	721	7 1	722	7 1	7 0	719	717	20 21	723	5 5	698	22†
723	725	723	727	728	724	7 1	721	719	722	6 11	733	10 9	716	23
718	716	716	717	716	715	713	711	714	713	7 51	720	9 46	705	24
709	708	710	711	711	711	709	708	707	711	7 53	727	10 21	704	25
708	709	712	714	713	712	711	710	710	707	18 1	715	6 5	696	26
716	717	719	719	718	717	716	715	713	714	17 19	720	1 31	704	27
718	719	720	721	720	720	719	718	718	717	17 57	722	6 21	710	28†
717	716	719	721	721	720	720	720	718	718	2 57	726	12 46	713	29†
711	712	713	713	714	713	713	712	713	711	0 0	719	5 49	704	30
712	713	715	716	716	715	715	714	714	712					Mean.
720	720	722	723	723	722	722	721	721	720					Mean.†

DECEMBER.

715	715	716	719	719	719	71	718	718	718	3 33	726	12 37	706	1
714	713	714	716	716	716	71	715	711	715	5 3	720	7 17	704	2
712	711	714	718	718	718	71	711	711	710	2 45	722	5 17	687	3
703	701	700	701	700	698	697	697	696	704	3 17	710	5 15	693	4†
714	713	715	714	712	713	71	712	706	707	11 5	719	5 1	693	5
718	719	720	717	716	716	71	715	717	720	4 32	738	1 39	712	6
719	719	720	727	722	719	72	7 0	717	717	3 29	726	6 13	703	7
717	718	720	720	719	719	719	719	719	718	0 41	722	11 47	711	8
714	7 3	715	717	717	716	715	715	715	715	3 25	7 4	5 45	706	9
707	707	710	711	710	710	711	711	710	709	3 35	721	7 1	698	10
711	712	714	718	716	718	71	714	714	714	10 21	721	12 25	706	11
722	724	725	727	728	725	7 9	7 8	728	721	20 21	730	1 47	707	12
729	726	728	7 9	731	731	731	732	730	724	22 35	733	7 3	713	13
728	729	731	730	730	730	7 9	727	728	7 9	4 11	736	12 17	718	14
724	7 5	726	725	726	725	7 3	721	722	721	1 5	727	8 17	704	15
716	716	717	718	719	717	717	717	717	716	4 19	737	6 37	704	16
718	719	720	720	721	7 3	719	719	717	716	19 21	721	8 35	708	17†
716	714	715	717	718	717	717	716	716	714	9 28	727	9 33	698	18
722	721	723	725	726	722	722	723	723	718	2 25	726	7 51	702	11†
732	732	733	733	731	731	730	729	729	727	2 57	737	5 45	710	20†
732	730	734	735	734	733	734	732	734	730	3 9	741	6 1	706	21
738	736	735	734	732	731	730	731	730	732	3 5	743	8 1	718	22
745	743	744	743	744	744	743	744	744	738	3 41	759	6 25	706	23†
742	742	743	740	739	738	736	735	734	742	8 15	752	5 36	730	24
736	736	734	733	732	730	728	729	726	736	2 23	757	6 11	725	25
722	721	721	721	721	719	718	717	717	724	2 41	749	9 53	717	26
699	698	697	695	695	699	698	697	696	703	3 41	729	7 51	691	27
681	679	681	682	681	681	680	679	679	683	3 29	699	5 48	668	28
668	670	670	672	671	669	669	668	668	670	2 41	681	5 31	662	29
669	669	668	668	668	668	668	668	668	669	2 55	678	5 11	662	30
740	740	739	738	736	735	735	737	736	739	23 29	761	0 36	666	31
717	716	718	718	718	717	717	717	716	716					Mean.
724	723	724	725	724	723	722	722	722	720					Mean †

*See footnote on page 113.
†Five International quiet days.

At Colaba, a day is classed as (1) a quiet day, or a day of (2) small, (3) moderate, (4) great or (5) very great disturbance, the letters for distinguishing each class being C, S, M, G and VG respectively. For representing intermediate conditions of activity of the smaller period movements, sub-classifications Ca, Sa and Ma are used. Roughly speaking a storm having a range over 225 γ in the variation of the horizontal force during the first twenty-four hours after its commencement is classed as "Very great". It is "Great" if the range is between 150 γ and 225 γ, "Moderate" if the range is between 65 γ and 150 γ and "Small" if the range is less than 65 γ. The range is however not the only criterion used in assigning the character of a storm. The oscillations in the magnetograms are duly taken into account in determining the class to which a particular storm should belong. During the year there were 4 days of "Very Great", 13 of "Great", 42 of "Moderate" and 147 of "Small" disturbances. The following table gives a list of principal disturbances recorded during the year. Of the smaller disturbances, only those which showed special features have been included in this table.

PRINCIPAL MAGNETIC DISTURBANCES, 1928.

Date.	Time of beginning. G. M. T.		Duration in hours.	Horizontal force during storm.						Range	Relative magnitude.	Remarks.
	Maximum.					Minimum.						
	Time.			Magnitude.		Time.			Magnitude.			
	H.	M.		D.	H. M.	D.	H.	M.	γ	γ		
1927 Dec. 31	5	22	43	1	12 32	37174	2	4	37122	52	M	Commencement sudden.
1928 Jan. 27	2	17	68	27	10 24	37182	27	17	40 37121	101	G	Do.
February 1	5	34	43	1	12 28	37198	2	22	24 37134	64	Sa	Do.
,, 12	7	17	64	12	12 24	37208	14	0	16 37116	92	Sa	Do.
,, 18	4	9	40	18	10 24	37273	18	17	40 37107	116	M	Commencement gradual.
,, 20	18	35	30	21	12 14	37185	21	17	42 37118	67	Sa	Commencement sudden.
,, 25	3	9	47	26	11 55	37211	26	21	30 37109	102	Sa	Commencement gradual.
March 11	3	37	39	11	12 52	37216	11	19	59 36991	225	G	Commencement sudden.
,, 23	17	1	52	24	11 26	37208	25	20	12 37113	93	Sa	Do.
April 1	6	37	34	1	11 34	37239	1	22	32 37120	109	M	Do.
,, 3	5	9	22	3	10 26	37207	3	20	52 37100	107	M	Commencement gradual.
,, 4	6	21	20	4	11 21	37218	4	22	15 37115	103	Sa	Commencement sudden.
,, 6	19	6	47	7	10 12	37212	8	22	15 37111	101	Sa	Do.
,, 10	3	9	15	10	10 12	37218	10	18	32 37121	94	Sa	Commencement gradual.
,, 19	21	9	52	21	11 8	37213	20	7	44 37123	90	M	Do.
May 5	2	48	25	5	10 36	37194	5	23	32 37135	59	M	Commencement sudden.
,, 10	13	16	105	14	11 4	37204	11	21	12 37070	134	M	Do.
,, 18	9	9	109	19	5 49	37204	18	14	44 37121	83	Sa	Commencement gradual.
,, 27	13	28	82	27	10 51	37190	28	18	36 36979	221	G	Commencement sudden.
,, 31	5	9	20	31	12 4	37184	31	20	14 37121	63	Sa	Commencement gradual.
June 1	6	9	40	2	14 48	37193	2	2	50 37119	85	M	Do.
,, 5	5	9	39	5	14 32	37203	6	22	26 37131	72	M	Do.
,, 7	4	9	47	7	10 56	37197	7	21	46 37044	153	M	Do.
,, 9	5	49	18	9	11 48	37197	9	16	40 37127	70	Sa	Commencement sudden.
,, 11	21	29	26	12	12 52	37187	12	16	40 37086	99	M	Do.
,, 13	5	9	46	13	12 4	37198	13	18	28 37046	152	Ma	Commencement gradual.
,, 22	4	9	62	22	10 26	37232	22	18	32 37077	155	Ma	Do.
July 2	8	58	42	2	13 28	37263	2	19	28 37104	159	Ma	Commencement sudden.
,, 7	22	11	48	8	4 40	37483	8	14	48 36684	779	VG	Do.
,, 21	2	9	56	21	11 56	37197	22	16	20 37080	117	M	Commencement gradual.
,, 31	10	9	39	31	15 1	37189	Aug.	1	0 12 37097	88	M	Do.
August 4	13	7	33	4	22 5	37163	5	22	8 37053	105	Ma	Commencement sudden.
,, 6	5	9	35	6	10 40	37188	7	15	26 37087	101	M	Commencement gradual.
,, 25	22	35	71	25	8 28	37179	26	18	4 37012	135	Ma	Commencement sudden.
September 2	2	0	24	2	11 44	37215	3	21	44 37051	164	Ma	Do.
,, 7	13	47	56	7	18 42	37153	7	21	38 37030	123	Ma	Do.
,, 16	15	42	32	16	20 40	37185	19	17	39 37070	115	M	Do.
,, 24	16	25	51	25	10 5	37216	25	20	40 37077	139	Ma	Do.
October 2	5	9	17	2	11 14	37213	2	22	22 37075	138	M	Commencement gradual.
,, 5	0	9	21	5	11 46	37207	5	21	14 37079	128	M	Do.
,, 13	13	9	21	14	11 18	37196	13	21	0 37096	103	M	Do.
,, 15	23	9	25	16	10 6	37224	16	20	16 37098	126	M	Do.
,, 18	7	23	45	18	12 32	37299	18	18	46 36937	407	VG	Commencement sudden.
,, 24	5	57	91	27	10 40	37225	25	7	4 37058	167	G	Do.
November 1	16	9	36	1	23 35	37180	2	18	54 37077	103	Ma	Commencement gradual.
,, 3	8	9	36	4	11 40	37158	3	17	34 37063	95	M	Do.
,, 10	6	55	13	10	11 54	37296	10	18	44 37034	232	G	Commencement sudden.
,, 11	16	59	52	12	10 32	37296	13	21	58 37058	148	M	Do.
,, 15	13	9	82	16	11 50	37219	15	20	38 37098	131	M	Commencement gradual.
,,	20	19	9	17	Dec. 1 9 20	37922	Dec.	1	14 2 37161	61	Sa	Do.
December 5	16	19	32	6	4 31	37220	6	17	52 37107	113	M	Commencement sudden.
,, 17	16	9	56	18	10 46	37208	12	17	34 37128	80	Sa	Commencement gradual.
,, 24	3	54	48	24	11 0	37227	24	20	32 37154	73	M	Commencement sudden.

Fourier analysis of the diurnal and annual variations of Horizontal force for the five International quiet days during 1928.

Diurnal variation : $\triangle H = c_1 \sin(\theta + \varphi_1) + c_2 \sin(2\theta + \varphi_2) + \ldots\ldots$; θ is counted at the rate of 15° per hour from midnight to midnight (G. M. T.).

Annual variation : $\triangle H = c_1 \sin(\theta + \varphi_1) + c_2 \sin(2\theta + \varphi_2) + \ldots\ldots$; θ is counted at the rate of 30° per average month.

Quantity.	Diurnal Variation.												Annual Variation.
	Jan.	Feb.	March.	April.	May.	June.	July.	August.	Sept.	Oct.	Nov.	Dec.	
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
c_1	10·1	21·5	21·5	28·2	25·8	17·8	19·3	22·5	17·1	21·1	22·5	11·7	16·7
c_2	3·2	8·0	10·7	12·2	11·4	10·1	10·9	12·1	9·2	12·6	10·8	3·6	9·4
c_3	2·7	3·2	6·2	3·7	4·0	2·7	3·1	3·7	8·9	6·9	3·6	2·1	4·6
c_4	2·1	0·9	1·9	1·9	1·5	1·1	0·3	0·2	1·4	2·2	1·2	1·3	4·4
c_1/c_2	1·9	2·7	2·0	2·3	2·3	1·8	1·8	1·9	1·9	1·7	2·1	3·3	1·8
	° ′	° ′	° ′	° ′	° ′	° ′	° ′	° ′	° ′	° ′	° ′	° ′	° ′
φ_1	323 9	349 27	343 22	338 47	350 51	344 59	341 19	340 59	332 19	352 27	355 14	357 41	38 6
φ_2	23 33	244 24	248 29	246 8	249 27	237 14	236 41	231 50	221 49	261 47	261 23	280 35	330 55
φ_3	131 11	161 0	158 32	176 34	184 54	148 5	140 40	137 23	145 58	184 17	196 2	213 28	127 30
φ_4	27 48	15 19	51 46	115 22	102 32	89 30	95 46	67 45	60 45	88 57	86 17	54 58	106 11

COLABA OBSERVATORY.

φ=18° 53′ 36″ N ; λ=72° 48′ 54″ E ; h=6 metres. *Subsoil*—Trap.

Apparatus.—Mile-Shaw Seismograph (N.-S.) :

(In the underground constant temperature room).

Damping Ratio=2·0 : 1 ; V.=250 ; T_0=12 Sec. ; ε=2·6.

Date.	Phase.	Time G. M. T.	Period (Sec.)	Amplitude (μ) An.	Remarks.	Date.	Phase.	Time G. M. T.	Period (Sec.).	Amplitude (μ) An.	Remarks.
1928.		H. M. S.				1928—*contd.*		H. M. S.			
Jan. 1	e	9 46 0	..	..	Tremors.	Jan. 12	M	12 27 16	4	1	
	f	10 19 0	..	..			F	12 41 0	..	..	
,, 1	e	18 54 0	..	..	Tremors.	,, 12	e	14 20 0	..	..	Tremors.
	f	19 31 0	..	..			f	15 11 0	..	..	
,, 3	e	6 27 0	..	..	Tremors.	,, 12-13	e	23 32 0	..	..	Tremors.
	f	6 49 0	..	..			f	0 12 0	..	..	
,, 4	P	21 38 5	..	..		,, 14	P	21 32 18	..	..	Feeble shock.
	S	21 47 12	..	..			F	21 37 0	..	..	
	L	22 2 42	..	..		,, 15	P	3 1 52	..	..	
	M	22 7 10	13	2			S	3 5 52	..	..	
	F	22 54 0	..	..			L	3 7 59	..	..	
							M	3 8 4	4	5	
,, 5	P	12 14 38	..	..			F	3 39 0	..	..	
	S	12 19 8	..	..		,, 21	P	15 4 21	..	..	Feeble shock.
	Le	12 22 35	..	..			S	15 9 5	..	..	
	M	12 25 2	10	2			L	15 12 29	..	..	
	F	12 38 0	..	..			F	15 29 0	..	..	
,, 6	P	19 39 44	..	..							
	S	19 45 51	..	..		,, 23	e	10 59 0	..	..	Tremors.
	L	19 51 56	..	..			f	11 21 0	..	..	
	M	19 56 52	19	87		,, 26-27	P	21 58 10	..	..	
	F	21 29 0	..	..			S	22 3 28	..	..	
							L	22 8 10	..	..	
,, 10	P	2 35 15	..	..			M	22 10 32	14	11	
	S	2 39 35	..	..			F	0 28 0	..	..	
	L	2 42 21	..	..							
	M	2 49 50	15	4		,, 27	e	19 46 0	..	..	Tremors.
	F	3 27 0	..	..			f	20 10 0	..	..	
,, 11	P	7 48 0	..	..	Feeble local shock.	,, 27	e	22 38 0	..	..	Tremors.
	F	7 49 0	..	..			f	23 11 0	..	..	
,, 11	P	8 4 0	..	..	Feeble local shock.	,, 29	e	0 38 0	..	..	Tremors.
	F	8 5 0	..	..			f	1 1 0	..	..	
,, ,,	P	8 7 0	..	..	Feeble local shock.	,, 29	e	10 47 0	..	..	Tremors.
	F	8 8 0	..	..			f	11 24 0	..	..	
,, 11	P	8 24 0	..	..	Feeble local shock.	,, 30	P	3 24 51	..	..	
	F	8 26 0	..	..			S	3 32 35	..	..	
,, 12	P	12 25 6	..	..			L	3 43 29	..	..	
	S	12 26 21	..	..			M	3 57 35	15	4	
	L	12 27 9	..	..			F	4 42 0	..	..	
						Feb. 2	e	8 44 0	..	..	Tremors.

Date.	Phase.	Time G. M. T.	Period (Sec.).	Amplitude (μ) An.	Remarks.
1928—*contd.*		H. M. S.			
Feb. 2	f	9 14 0	..	..	
„ 3	P	13 57 54	..	..	
	S	14 6 5	..	..	
	L	14 18 52	..	..	
	M	14 25 29	7	3	
	F	14 57 0	..	..	
„ 4	e	6 30 0	..	..	Tremors.
	f	7 36 0	..	..	
„ 4	e	22 3 0	..	..	Tremors.
	f	22 24 0	..	..	
„ 6	P	0 31 28	..	..	
	S	0 33 18	..	..	
	L	0 33 57	..	..	
	M	0 34 8	4	5	
	F	0 56 0	..	..	
„ 6	P	4 1 53	..	..	
	S	4 9 3	..	..	
	L	4 18 43	..	..	
	M	4 30 58	8	3	
	F	5 15 0	..	..	
„ 7	P	0 7 24	..	..	
	S	0 12 1	..	..	
	L	0 15 6	..	..	
	M	0 17 11	16	112	
	F	2 59 0	..	..	
„ 10	P	4 58 3	..	..	Feeble shock.
	S	5 1 36	..	..	
	L	5 3 38	..	..	
	F	5 25 0	..	..	
„ 11	e	10 21 0	..	..	Tremors.
	f	10 39 0	..	..	
„ 11	P	16 18 13	..	..	Feeble shock.
	S	16 20 27	..	..	
	L	16 21 13	..	..	
	F	16 35 0	..	..	
„ 13	e	16 53 0	..	..	Tremors.
	f	17 40 0	..	..	
„ 17	e	13 3 0	..	..	Tremors.
	f	13 22 0	..	..	
„ 21	P	20 1 28	..	..	
	S	20 11 41	..	..	
	L	20 31 36	..	..	
	M	20 38 49	14	10	

Date.	Phase.	Time G. M. T.	Period (Sec.)	Amplitude (μ) An.	Remarks.
1928—*contd*		H. M. S.			
Feb. 21	F	21 57 0	..	..	
„ 24	P	14 33 5	..	..	
	S	14 41 35	..	..	
	L	14 55 35	..	..	
	M	14 58 10	8	3	
	F	15 38 0	..	..	
„ 25	e	11 13 0	..	..	Tremors.
	f	13 7 0	..	..	
„ 25	P	17 27 45	..	..	Feeble shock.
	S	17 31 18	..	..	
	Le	17 32 43	..	..	
	F	17 53 0	..	..	
„ 26	P	1 31 38	..	..	
	S	1 41 56	..	..	
	L	2 1 48	..	..	
	M	2 6 53	7	5	
	F	3 0 0	..	..	
„ 28	e	9 3 0	..	..	Tremors.
	f	10 6 0	..	..	
„ 29	P	22 21 27	..	..	
	S	22 29 37	..	..	
	L	22 43 12	..	..	
	M	22 48 22	20	10	
	F	23 55 0	..	..	
Mar. 7	P	0 45 11	..	..	
	S	9 50 43	..	..	
	L	9 55 43	..	..	
	M	9 58 33	10	2	
	F	10 14 0	..	..	
„ 7	e	11 3 0	..	..	Tremors.
	f	11 33 0	..	..	
„ 7-8	P	22 49 55	..	..	
	S	22 55 24	..	..	
	L	23 0 13	..	..	
	M	23 2 58	10	32	
	F	0 15 0	..	..	
„ 8	P	18 18 6	..	..	
	S	18 21 37	..	..	
	L	18 23 43	..	..	
	M	18 27 13	7	4	
	F	18 59 0	..	..	
„ 9	P	18 11 8	..	..	
	S	18 15 48	..	..	
	L	Movements very quick.			
	M	18 55 31	10	93	
	F	22 33 0	..	..	

Date.	Phase.	Time G. M. T.	Period (Sec.).	Amplitude (μ) An.	Remarks.
1928—*contd.*		H. M. S.			
Mar. 10	P	3 23 38	..	..	
	S	3 28 20	..	..	
	L	3 31 56	..	..	
	M	3 36 49	9	6	
	F	5 13 0	..	..	
,, 10	P	5 58 54	..	..	
	S	6 3 44	..	..	
	L	6 7 34	..	..	
	M	6 12 14	12	4	
	F	7 2 0	..	..	
,, 12	e	8 52 0	..	..	Tremors.
	f	9 34 0	..	..	
,, 13	P	1 43 18	..	..	
	S	1 47 54	..	..	
	L	1 51 6	..	..	
	M	1 56 23	12	4	
	F	Lost during shifting time.			
,, 13	P	18 44 32	..	..	
	S	18 54 17	..	..	
	L	19 12 37	..	..	
	M	Lost in hourly time mark.			
	F	20 12 0	..	..	
,, 16	P	5 15 9	..	..	
	S	5 25 39	..	..	
	L	5 46 39	..	..	
	M	6 11 34	19	92	
	F	9 16 0	..	..	
,, 18	P	1 38 14	..	..	
	S	1 42 57	..	..	
	L	1 46 34	..	..	
	M	1 48 4	8	1	
	F	2 12 0	..	..	
,, 18	e	3 30 0	..	..	Tremors.
	f	4 56 0	..	..	
,, 18	P	12 22 59	..	..	
	Se	12 32 49	..	..	
	L	12 51 44	..	..	
	M	13 9 59	19	3	
	F	14 1 0	..	..	
,, 19	P	10 6 34	..	..	
	S	10 10 4	..	..	
	L	10 12 7	..	..	
	M	10 16 34	14	5	
	F	11 17 0	..	..	
,, 20	e	21 19 0	..	..	Tremors.

Date.	Phase.	Time G. M. T.	Period (Sec.).	Amplitude (μ) An.	Remarks.
1928—*contd.*		H. M. S.			
Mar. 20	f	21 53 0	..	..	
,, 21	Pe	4 5 19	..	..	
	S	4 9 44	..	..	
	L	4 11 44	..	..	
	M	4 12 16	13	2	
	F	4 27 0	..	..	
,, 22	P	4 36 37	..	..	
	S	4 50 1	..	..	
	L	5 26 41	..	..	
	M	5 45 11	20	13	
	F	8 16 0	..	..	
,, 23	e	20 32 0	..	..	Tremors.
	f	22 40 0	..	..	
,, 26	Pe	5 35 1	..	..	
	S	5 43 31	..	..	
	L	5 56 41	..	..	
	M	5 59 31	17	6	
	F	6 35 0	..	..	
,, 26	Pe	6 54 11	..	..	Feeble shock.
	S	7 0 31	..	..	
	L	7 7 31	..	..	
	M	7 17 11	16	4	
	F	7 47 0	..	..	
,, 26	P	8 23 21	..	..	Feeble shock.
	S	8 29 11	..	..	
	Le	8 35 41	..	..	
	F	10 0 0	..	..	
,, 27	P	14 47 2	..	..	Feeble shock.
	S	14 53 22	..	..	
	Le	13 1 47	..	..	
	F	15 19 0	..	..	
,, ,,	P	19 16 17	..	..	
	S	19 23 49	..	..	
	Le	19 32 57	..	..	
	M	19 33 17	24	11	
	F	20 45 0	..	..	
,, 29	P	5 15 30	..	..	
	S	5 23 0	..	..	
	L	5 34 5	..	..	
	M	5 41 12	18	9	
	F	7 3 0	..	..	
,, 31	P	0 37 54	..	..	
	S	0 44 31	..	..	
	L	0 52 31	..	..	
	M	0 59 1	20	10	

Date.	Phase.	Time G. M. T.	Period (Sec.).	Ampli. tude (μ) An.	Remarks.
1928—*contd.*		H. M. S.			
Mar. 31	F	2 49 0	..	..	
Apl. 3	P	17 7 0	..	..	Tremors.
	F	18 11 0	..	..	
„ 4	P	6 8 0	..	..	Feeble local shock.
	F	6 9 0	..	..	
„ 4	P	6 28 0	..	..	Feeble local shock.
	F	6 29 0	..	..	
„ 4	P	6 35 0	..	..	Feeble local shock.
	F	6 36 0	..	..	
	P	9 17 0	..	..	Feeble local shock.
	F	9 18 0	..	..	
„ 7	e	20 39 0	..	..	Tremors.
	f	21 22 0	..	..	
„ 9	P	17 53 51	..	..	
	Se	18 5 49	..	..	
	L	18 34 39	..	..	
	M	19 2 6	20	10	
	F	20 15 0	..	..	
„ 10	e	21 55 0	..	..	Tremors.
	f	22 8 0	..	..	
„ 11	P	10 1 7	..	..	Feeble shock.
	S	10 3 23	..	..	
	L	10 4 23	..	..	
	Fe	10 32 0	..	..	
„ 12	P	12 29 42	..	..	Feeble shock.
	S	12 33 7	..	..	
	Le	12 34 42	..	..	
	F	12 51 0	..	..	
„ 13-14	e	23 36 0	..	..	Tremors.
	f	1 6 0	..	..	
„ 14	P	9 8 26	..	..	
	S	9 15 13	..	..	
	L	9 23 50	..	..	
	M	9 39 33	12	8	
	F	11 37 0	..	..	
„ 14	e	13 28 0	..	..	Tremors.
	f	13 55 0	..	..	
„ 15	P	18 29 0	..	..	Feeble local shock.
	F	18 30 0	..	..	
„ 16	e	20 6 0	..	..	Tremors.
	f	20 36 0	..	..	
„ 17	P	3 44 52	..	..	
	Se	3 55 6	..	..	
	L	4 30 56	..	..	
	M	4 56 16	19	6	
	F	5 43 0	..	..	
1928—*contd.*					
Apl. 18	P	19 31 32	..	..	
	S	19 38 32	..	..	
	L	19 47 44	..	..	
	M	19 47 57	10	10	
	F	21 34 0	..	..	
„ 22	P	20 22 53	..	..	
	S	20 29 53	..	..	
	Ll	20 39 6	..	..	
	M	20 45 23	15	4	
	F	21 19 0	..	..	
„ 24	e	14 21 0	..	..	Tremors.
	f	14 37 0	..	..	
„ 24	P	20 0 40	..	..	Feeble shock.
	S	20 4 46	..	..	
	L	20 7 29	..	..	
	F	20 26 0	..	..	
„ 25	P	1 21 17	..	..	
	S	1 24 44	..	..	
	L	1 26 25	..	..	
	M	1 28 52	10	1	
	F	Lost during shifting time.			
„ 27	Fe	20 55 31	..	..	
	S	21 8 16	..	..	
	L	21 37 31	..	..	
	M	22 8 55	20	4	
	F	22 45 0	..	..	
May 1	e	1 25 0	..	..	
	f	1 50 0	..	..	
„ 1	P	19 17 22	..	..	
	S	19 25 45	..	..	
	L	19 39 20	..	..	
	M	19 42 19	10	2	
	F	20 13 0	..	..	
„ 2	P	22 2 32	..	..	
	S	22 8 58	..	..	
	L	22 16 20	..	..	
	M	22 24 3	19	5	
	F	23 5 0	..	..	
„ 5	e	13 52 41	..	..	Feeble shock.
	M	13 59 18	11	2	
	f	14 13 0	..	..	
„ 8	L	4 56 5	..	..	
	S	5 4 12	..	..	
		5 17 7	..	..	
	M	5 24 30	8	1	

Date.	Phase.	Time G. M. T.			Period (Sec.).	Amplitude (μ) An.	Remarks.
1928—*contd.*		H.	M.	S.			
May 1	F	6	5	0	..	..	
,, 14-16	P	22	34	37	..	..	
	S	22	48	27	..	..	
	L	23	34	37	..	..	
	M	23	52	32	20	48	
	F	2	14	0	..	..	
,, 15	P	2	56	11	..	..	
	S	3	10	1	..	..	
	L	3	50	31	..	..	
	M	4	7	11	18	3	
	F	4	49	0	..	..	
,, 19	P	3	33	14	..	..	
	S	3	37	2	..	..	
	L	3	39	19	..	..	
	M	3	41	26	8	4	
	F	4	20	0	..	..	
,, ,,	e	9	42	0	..	..	Tremors.
	f	10	34	0	..	..	
,, 20	P	16	39	24	..	..	Feeble shock.
	S	16	47	38	..	..	
	Le	17	5	33	..	..	
	F	17	38	0	..	..	
,, 25	P	5	0	0	..	..	Feeble local shock.
	F	5	2	0	..	..	
,, 27	P	1	2	24	..	..	
	S	1	4	3	..	..	
	L	1	4	39	..	..	
	M	1	4	59	5	7	
	F	1	21	0	..	..	
,, ,,	P	10	0	47	..	..	
	S	10	9	3	..	..	
	L	10	22	58	..	..	
	M	10	26	47	20	77	
	F	13	34	0	..	..	
,, 28	P	15	46	8	..	..	
	Se	15	54	33	..	..	
	L	16	8	9	..	..	
	M	16	15	47	14	6	
	F	16	49	0	..	..	
,, 29	Pe	12	31	30	..	..	
	S	12	36	0	..	..	
	L	12	39	0	..	..	
	M	12	46	22	8	3	

Date.	Phase.	Time G. M. T.			Period (Sec.).	Amplitude (μ) An.	Remarks.
1928—*contd.*		H.	M.	S.			
May 29	F	13	20	0	..	..	
May31June 1	P	23	34	9	..	..	
	S	23	42	34	..	..	
	L	23	56	19	..	..	
	M	0	5	39	16	10	
	F	Lost in shifting time.					
June 1	e	12	43	0	..	..	Tremors.
	f	13	19	0	..	..	
,, 1	P	13	22	48	..	..	
	S	13	31	20	..	..	
	L	13	45	13	..	..	
	M	13	52	29	12	11	
	F	15	14	0	..	..	
,, 3	P	8	40	0	..	..	
	S	8	47	43	..	..	
	L	8	58	52	..	..	
	M	9	2	3	15	10	
	F	10	14	0	..	..	
,, 3	P	23	29	7	..	..	Local shock.
	M	23	30	5	..	..	
	F	23	40	0	..	..	
,, 4	P	2	6	0	..	..	Feeble local shock.
	F	2	11	0	..	..	
,, 5	e	6	23	0	..	..	Tremors.
	f	6	44	0	..	..	
,, 6	P	3	4	0	..	..	Feeble local shock.
	F	3	5	0	..	..	
,, ,,	P	4	9	0	..	..	Feeble local shock.
	F	4	10	0	..	..	
,, 8	e	15	50	0	..	..	Tremors.
	f	16	5	0	..	..	
,, 11	e	6	17	0	..	..	Tremors.
	f	6	30	0	..	..	
,, 15	P	6	21	11	..	..	
	S	6	27	49	..	..	
	L	6	35	51	..	..	
	M	6	43	8	16	21	
	F	8	1	0	..	..	
,, ,,	P	17	25	3	..	..	
	S	17	31	44	..	..	
	L	17	39	46	..	..	
	M	17	45	10	17	19	
	F	18	55	0	..	..	
,, 17	P	3	39	0	..	..	
	S	3	52	36	..	..	

Date.	Phase.	Time G. M. T.	Period (Sec.).	Amplitude (μ) An.	Remarks.
1928—*contd.*		H. M. S.			
June 17	L	4 31 36	..	..	
	M	4 48 22	28	287	
	F	7 19 0	..	..	
„ 19	P	4 18 0	..	..	
	F	4 19 0	..	..	Feeble local shock.
„ 21	P	11 0 48	..	..	
	S	11 11 32	..	..	
	L	11 33 1	..	..	
	M	11 54 26	18	14	
	F	13 55 0	..	..	
„ „	P	16 40 37	..	..	
	S	16 51 14	..	..	
	L	17 12 49	..	..	
	M	17 28 57	19	30	
	F	19 46 0	..	..	
„ 24	P	4 38 34	..	..	
	S	4 40 36	..	..	
	L	4 43 4	..	..	
	M	4 47 9	10	8	
	F	5 18 0	..	..	
„ 28	P	1 33 10	..	..	
	S	1 37 50	..	..	
	L	1 41 20	..	..	
	M	1 47 46	10	3	
	F	2 12 0	..	..	
„ 29-30	P	23 5 45	..	..	
	S	23 15 23	..	..	
	L	23 33 28	..	..	
	M	23 46 0	20	15	
	F	1 32 0	..	..	
July 1	e	17 8 0	..	..	Tremors.
	f	17 19 0	..	..	
„ 4	P	17 57 47	..	..	
	S	18 1 6	..	..	
	L	18 2 42	..	..	
	M	18 6 31	14	5	
	F	18 32 0	..	..	
„ 6	P	0 52 22	..	..	
	S	0 56 46	..	..	
	L	0 59 51	..	..	
	M	1 4 12	20	6	
	F	1 23 0	..	..	
„ „	e	1 53 0	..	..	Tremors.
	f	2 5 0	..	..	
„ „	P	20 32 8	..	..	

Date.	Phase.	Time G. M. T.	Period (Sec.).	Amplitude (μ) An.	Remarks.
1928—*contd.*		H. M. S.			
July 6	S	20 33 58	..	..	
	L	20 34 38	..	..	
	M	20 36 3	9	2	
	F	20 45 0	..	..	
„ 9	P	15 56 54	..	..	
	S	15 59 22	..	..	
	L	16 0 32	..	..	
	M	16 0 45	8	5	
	F	16 17 0	..	..	
„ 9	P	21 37 1	..	..	
	S	21 47 13	..	..	
	L	22 7 14	..	..	
	M	22 32 9	15	5	
	F	23 21 0	..	..	
„ 11	e	3 58 0	..	..	Tremors.
	f	4 18 0	..	..	
„ 13	e	10 24 0	..	..	Tremors.
	f	10 37 0	..	..	
„ 18	P	19 25 3	..	..	
	S	19 35 37	..	..	
	L	19 57 16	..	..	
	M	Loss of record owing to the speck going out of paper.			
	F	Ditto		ditto	
„ 27	P	15 28 34	..	..	
	S	15 32 57	..	..	
	L	15 36 4	..	..	
	M	15 41 18	20	7	
	F	16 5 0	..	..	
„ 31	e	1 0 0	..	..	Tremors.
	f	1 33 0	..	..	
August 4	P	18 46 49	..	..	
	S	18 59 15	..	..	
	L	19 35 15	..	..	
	M	19 58 44	19	44	
	F	21 21 0	..	..	
„ 5	Pe	14 52 24	..	..	Feeble shock.
	S	14 56 44	..	..	
	L	14 59 34	..	..	
	F	15 32 0	..	..	
„ 6	e	18 26 0	..	..	Tremors.
	f	18 34 0	..	..	
„ 8	P	2 32 24	..	..	
	Se	2 37 26	..	..	
		2 41 19	..	..	
		2 44 9	15	3	

Date.	Phase.	Time G. M. T.	Period (Sec.).	Amplitude (μ) An.	Remarks.
1928—*contd.*		H. M. S.			
Aug. 8	F	3 12 0	..	..	
,, 10	P	15 37 41	..	..	
	S	15 40 55	..	..	
	L	15 42 32	..	..	
	M	15 45 25	7	4	
	F	16 5 0	..	..	
,, 12	P	8 18 20	..	..	
	S	8 25 56	..	..	
	L	8 37 3	..	..	
	M	8 47 32	12	3	
	F	9 11 0	..	..	
,, 15	e	17 38 0	..	..	Tremors.
	f	18 21 0	..	..	
,, 19	P	3 57 10	..	..	
	S	4 0 59	..	..	
	L	4 3 12	..	..	
	M	4 3 33	10	3	
	F	4 25 0	..	..	
,, 21	P	19 7 8	..	..	
	S	19 11 8	..	..	
	Le	19 13 25	..	..	
	M	19 17 11	16	7	
	F	19 32 0	..	..	
,, 23	P	3 58 44	..	..	
	S	4 2 57	..	..	
	L	4 5 56	..	..	
	M	4 10 59	9	9	
	F	4 23 0	..	..	
,, 24	e	0 31 0	..	..	Tremors.
	f	0 46 0	..	..	
,, 24	P	6 16 24	..	..	
	S	6 18 41	..	..	
	L	6 19 44	..	..	
	M	6 20 42	10	2	
	F	6 28 0	..	..	
,, 24	Pe	22 1 49	..	..	
	S	22 7 22	..	..	
	L	22 12 9	..	..	
	M	22 13 54	9	2	
	F	23 18 0	..	..	
Sept. 1	P	6 11 32	..	..	
	S	6 13 56	..	..	
	L	6 14 56	..	..	
	M	Lost owing to stoppage of driving clock.			
	F	8 14 0	..	..	

Date.	Phase.	Time G. M. T.	Period (Sec.).	Amplitude (μ) An.	Remarks.
1928—*contd.*		H. M. S.			
Sept. 2	e	1 22 0	..	..	Tremors.
	f	1 1 0	..	..	
,, 6	P	6 50 25	..	..	
	S	6 56 40	..	..	
	Le	7 3 40	..	..	
	M	7 8 57	12	2	
	F	7 35 0	..	..	
,, ,,	P	10 32 0	..	..	Feeble, local shock.
	F	10 33 0	..	..	
,, 7	P	3 1 0	..	..	
	Se	3 10 35	..	..	
	Le	3 27 35	..	..	
	M	3 36 5	..	..	
	F	4 18 0	30	6	
,, 10	e	17 35 0	..	..	Tremors.
	f	17 54 0	..	..	
,, 11	Pe	0 49 33	..	..	Feeble shock.
	S	0 59 40	..	..	
	L	1 19 10	..	..	
	F	1 39 0	..	..	
,, 11	P	12 56 36	..	..	
	S	13 8 1	..	..	
	L	13 33 6	..	..	
	M	13 45 36	26	7	
	F	15 10 0	..	..	
,, 12	P	1 38 36	..	..	Very feeble shock.
	F	2 46 0	..	..	
,, 13	P	3 35 57	..	..	
	S	3 43 29	..	..	
	L	3 54 18	..	..	
	M	3 58 14	28	10	
	F	4 54 0	..	..	
,, 13	e	21 49 0	..	..	Tremors.
	f	22 2 0	..	..	
,, 14	P	5 50 41	..	..	
	S	5 51 39	..	..	
	L	5 51 59	..	..	
	M	5 52 8	8	2	
	F	6 0 0	..	..	
,, 18	P	17 43 54	..	..	
	S	17 50 32	..	..	
	L	17 59 42	..	..	
	M	17 59 54	28	23	
	F	19 41 0	..	..	

Date.	Phase.	Time G. M. T.	Period (Sec.).	Amplitude (μ) An.	Remarks.
1928—*contd.*		H. M. S.			
Sept. 18	P	19 57 24	..	..	
	S	20 1 24	..	..	
	L	20 3 48	..	..	
	M	20 3 54	10	11	
	F	21 44 0	..	..	
,, 20	e	10 23 0	..	..	Tremors.
	f	11 5 0	..	..	
,, 22	P	7 45 7	..	..	
	S	7 56 10	..	..	
	L	8 20 23	..	..	
	M	8 47 13	16	6	
	F	11 20 0	..	..	
,, 24	P	9 29 21	..	..	Feeble shock.
	S	9 31 52	..	..	
	L	9 32 58	..	..	
	F	10 6 0	..	..	
,, 25	P	8 13 53	..	..	
	S	8 23 15	..	..	
	L	8 40 32	..	..	
	M	8 49 22	15	3	
	F	9 29 0	..	..	
Oct. 4	Pe	18 30 19	..	..	
	S	18 36 6	..	..	
	L	18 41 36	..	..	
	M	18 43 41	10	3	
	F	19 34 0	..	..	
,, 9	P	3 20 46	..	..	
	S	3 34 11	..	..	
	L	4 10 36	..	..	
	M	4 30 16	25	130	
	F	6 34 0	..	..	
,, 12	P	7 34 43	..	..	
	Se	7 37 43	..	..	Feeble shock.
	L	7 39 11	..	..	
	F	7 49 0	..	..	
,, 12	Pe	7 51 8	..	..	Very feeble shock.
	M	8 13 53	18	5	
	F	9 12 0	..	..	
,, 13	P	15 34 11	..	..	
	S	15 39 31	..	..	
	L	15 44 11	..	..	
	M	15 49 41	18	4	
	F	16 15 0	..	..	

Date.	Phase.	Time G. M. T.	Period (Sec.).	Amplitude (μ) An.	Remarks.
1928—*contd.*		H. M. S.			
Oct. 15	Pe	8 49 42	..	..	Feeble shock.
	S	8 53 14	..	..	
	L	8 55 12	..	..	
	F	10 12 0	..	..	
,, 15	P	14 22 14	..	..	
	S	14 25 14	..	..	
	L	Movements very quick.			
	M	Movements very quick.			
	F	16 51 0	..	..	
,, 17	Pe	16 47 44	..	..	
	S	16 58 51	..	..	
	L	17 22 31	..	..	
	M	17 29 31	20	5	
	F	18 55 0	..	..	
,, 19	Pe	10 37 7	..	..	
	S	10 48 37	..	..	
	L	11 14 2	..	..	
	M	11 26 2	19	6	
	F	12 29 0	..	..	
,, 20	Pe	12 58 42	..	..	
	S	13 6 2	..	..	
	L	13 15 42	..	..	
	M	13 20 34	19	4	
	F	14 11 11	..	..	
,, 21	Pe	13 15 18	..	..	Local shock.
	S	13 16 52	..	..	
	L	13 17 29	..	..	
	M	13 21 53	7	3	
	F	13 42 0	..	..	
,, 22	Pe	3 47 31	..	..	
	S	3 49 14	..	..	
	L	3 49 56	..	..	
	M	3 53 47	8	2	
	F	4 16 0	..	..	
,, 23	P	18 3 24	..	..	
	S	18 12 52	..	..	
	L	18 29 45	..	..	
	M	18 31 47	30	15	
	F	19 19 0	..	..	
,, 25	P	12 42 47	..	..	
	S	12 47 53	..	..	
	L	12 51 58	..	..	
	M	12 57 51	12	4	
	F	Lost in the following shock.			

Date.	Phase.	Time G. M. T.	Period (Sec.).	Amplitude (μ) An.	Remarks.
1928—*contd.*		H. M. S.			
Oct. 25	Pe	13 22 36	..	..	
	S	13 39 56	..	..	
	L	13 50 36	..	..	
	M	14 4 26	20	7	
	F	14 54 0	..	..	
,, 31	e	20 41 0	..	..	Tremors.
	f	21 5 0	..	..	
Nov. 1	P	4 32 19	..	..	
	S	4 34 44	..	..	
	L	4 35 49	..	..	
	M	4 35 54	5	2	
	F	5 10 0	..	..	
,, 1	Pe	5 15 9	..	..	Feeble shock.
	Se	5 23 15	..	..	
	L	5 34 59	..	..	
	F	6 28 0	..	..	
,, 5	e	11 18 0	..	..	Feeble local shock.
	f	11 19 0	..	..	
,, 6	P	4 23 12	..	..	
	S	4 30 49	..	..	
	L	4 42 13	..	..	
	M	5 0 49	25	15	
	F	6 56 0	..	..	
,, *10*	Pe	12 44 42	..	..	Very feeble shock.
	F	14 27 0	..	..	
,, 11-12	P	22 50 57	..	..	
	S	22 58 4	..	..	
	L	23 9 27	..	..	
	M	23 9 47	18	12	
	F	0 48 0	..	..	
,, 13	P	4 0 0	..	..	Feeble local shock.
	F	4 2 0	..	..	
,, 14	P	4 36 46	..	..	
	S	4 39 46	..	..	
	L	4 41 23	..	..	
	M	4 43 11	5	12	
	F	5 31 0	..	..	
,, 15	e	2 45 0	..	..	Tremors.
	f	3 26 0	..	..	
,, 15	P	15 43 19	..	..	
	S	15 45 1	..	..	
	L	15 45 36	..	..	
	M	15 45 47	5	2	
	F	16 3 0	..	..	

Date.	Phase.	Times G. M. T.	Period (Sec.).	Amplitude (μ) An.	Remarks.
1928—*contd.*		H. M. S.			
Nov. 16	Pe	11 13 35	..	..	
	S	11 18 31	..	..	
	L	11 21 11	..	..	
	M	11 21 17	5	8	
	F	11 53 0	..	..	
,, 20	P	20 54 53	..	..	
	S	21 8 29	..	..	
	L	21 46 57	..	..	
	M	21 59 27	18	18	
	F	23 22 0	..	..	
,, 21	P	17 7 30	..	..	
	S	17 15 6	..	..	
	L	17 27 1	..	..	
	M	17 30 21	16	3	
	F	18 20 0	..	..	
,, 22	P	8 45 32	..	..	
	S	8 56 26	..	..	
	L	9 19 1	..	..	
	M	9 20 55	19	11	
	F	10 34 0	..	..	
,, 28	P	10 52 42	..	..	
	S	12 0 26	..	..	
	L	11 11 47	..	..	
	M	11 20 22	15	41	
	F	Lost owing to stoppage of driving clock.			
,, 29	Pe	16 4 51	..	..	
	S	16 16 51	..	..	
	L	16 45 16	..	..	
	M	16 57 19	18	4	
	F	17 39 0	..	..	
, 29	P	18 17 52	..	..	
	S	18 29 53	..	..	
	L	18 57 51	..	..	
	M	19 13 14	18	11	
	F	21 9 0	..	..	
,, 29-30	Pe	23 28 0	..	..	
	Se.	23 40 15	..	..	
	L	0 10 35	..	..	
	M	0 23 0	19	4	
	F	0 49 0	..	..	
Dec. 1st	P	4 25 49	..	..	
	S	4 30 32	..	..	
	L	5 19 18	..	..	
	M	5 24 43	20	86	
	F	9 35 0	..	..	

Date.	Phase.	Time G. M. T.	Period (Sec.)	Amplitude (μ) An.	Remarks.
1928—*contd.*		H. M. S.			
Dec 1	Pe	18 52 26	..	..	Very feeble shock.
	F	20 35 0	..	..	
,, 2	P	4 40 2	..	..	
	S	4 53 46	..	..	
	L	5 33 30	..	..	
	M	5 43 5	20	13	
	F	8 18 0	..	..	
,, 9	P	0 10 38	..	..	
	S	0 21 14	..	..	
	L	0 42 40	..	..	
	M	1 10 2	16	3	
,, 9	F	1 56 0	..	..	
	P	5 18 17	..	..	
	S	5 28 53	..	..	
	L	5 50 19	..	..	
	M	6 18 2	18	5	
	F	7 5 0	..	..	
,, 9	P	18 23 42	..	..	
	S	18 34 11	..	..	
	L	18 55 45	..	..	
	M	19 15 54	15	3	
	F	20 5 0	..	..	
,, 10	P	4 39 47	..	..	
	S	4 44 44	..	..	
	L	4 48 40	..	..	
	M	4 52 15	15	5	
	F	5 14 0	..	..	
,, 12	P	1 28 18	..	..	
	S	1 31 31	..	..	
	L	1 33 7	..	..	
	M	1 33 38	10	4	
	F	2 7 0	..	..	
,, 12	P	20 38 20	..	..	
	S	20 50 46	..	..	
	L	21 20 33	..	..	
	M	21 33 58	26	28	
	F	23 49 0	..	..	
,, 13	e	3 17 0	..	..	
	f	3 36 0	..	..	
,, 14	P	0 31 9	..	..	
	S	0 33 59	..	..	
	L	0 35 14	..	..	
	M	3 36 29	11	17	
	F	Lost in the following shock.			

Date.	Phase.	Time G. M. T.	Period (Sec.).	Amplitude (μ) An	Remarks.
1928—*concld.*		H. M. S.			
Dec. 14	Pe	1 12 34	..	..	
	S	1 15 21	..	..	
	L	1 16 39	..	..	
	M	1 18 47	8	3	
	F	2 4 0	..	..	
,, 14	P	2 6 9	..	..	
	S	2 10 57	..	..	
	L	2 14 41	..	..	
	M	2 26 39	15	4	
	F	3 11 0	..	..	
,, 14	P	8 47 0	..	..	Feeble local shock.
	F	8 49 0	..	..	
,, 14	e	20 1 0	..	..	Tremors.
	f	20 37 0	..	..	
,, 15	e	0 19 0	..	..	Tremors.
	f	0 56 0	..	..	
,, 19	P	11 46 19	..	..	
	S	11 53 42	..	..	
	L	12 4 14	..	..	
	M	12 13 12	16	145	
	F	16 40 0	..	..	
,, 26	P	21 52 40	..	..	
	S	21 56 45	..	..	
	L	21 59 30	..	..	
	M	22 2 35	8	1	
	F	22 31 0	..	..	
,, 27	e	5 45 0	..	..	Tremors.
	f	6 44 0	..	..	
,, 28	P	14 28 48	..	..	
	S	14 35 43	..	..	
	L	14 44 38	..	..	
	M	14 45 44	28	81	
	F	17 0 0	..	..	
,, 29	e	16 56 0	..	..	Tremors.
	f	17 3 0	..	..	
,, 31	P	7 43 37	..	..	
	S	7 47 13	..	..	
	L	7 49 16	..	..	
	M	7 50 10	7	2	
	F	8 11 0	..	..	

Appendix.

The Climatology of Bombay.

The Climatology of Bombay.

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THE CLIMATOLOGY OF BOMBAY.

1. Introduction.

The regular registration of meteorological observations in the Colaba Observatory commenced in November 1841, and, with few interruptions, the observations were taken hourly (generally omitting Sundays) until the end of April 1842; from May to August 1842 the night observations were omitted, but the complete hourly observations were resumed on 1st September 1842, and continued with the exception of January to March 1845, till the end of 1846; from January to May 1847 the observations appear to have been taken at the even hours only, of Gottingen mean time, and thenceforward, till the end of the year 1872, again hourly. From the beginning of the month of June 1867 was brought into use an anemograph, of the kind designed by Dr. Robinson, with improvements by Mr. Robert Beckley and it remained in action till October 1907 when it was replaced by a new instrument of the same pattern and the same makers. The construction of the large thermograph with its peculiar louvre design was completed on the 31st December 1872. The Kew barograph was also installed on that date in the underground constant temperature room. The number of readings of the several instruments taken by the eye was thereafter made five in a day instead of 24.

The meteorological data collected up to the year 1870 have been very thoroughly studied by Mr. Charles Chambers, F. R. S., in his volume on the *Meteorology of the Bombay Presidency*. The normal values of almost all the elements based on all the available data up to that year are to be found in this volume. In the appendix to the volume on "The magnetical, meteorological and seismographic observatons, 1898-99", Dr. N. A. F. Moos published the hourly normals for the principal meteorological elements derived from the autographic records for the years 1873 to 1896. Expressions were also given for the diurnal variations in terms of the Bessel's coefficients. When therefore a proposal was made that the climatological features of Bombay should be brought up to date and that the normal hourly values of the different meteorological elements should be re-calculated and based on all the available data up to the year 1920, it became necessary to scrutinise the earlier data before including them in the calculation of the revised normals and to make use as much as possible of the earlier calculation of the normals in order to save labour in computation. For the calculation of daily normals of all the elements, both Chambers and Moos arranged the figures representing the actual daily means in a line and performed six smoothing operations upon them. The value adopted as the normal of each day was the mean of the final smoothed mean for the day and of the seven preceding and seven succeeding smoothed means. For the north and east components of wind, as it was found that the above process did not eliminate small irregularities altogether, the value adopted as the normal for each day was the mean of its own and fourteen preceding and fourteen succeeding smoothed means. The actual daily means obtained from the larger series of data utilised in the preparation of the revised normals presented such a regular sequence of numbers that the elaborate smoothing operations of a somewhat arbitrary nature described above were considered unnecessary except in the case of rainfall.

2. Barometric Pressure.

The Observatory Standard Barometer (Newman No. 58) has been in uninterrupted use since the establishment of the Observatory and all eye observations of barometric pressure as well as the hourly tabulations of the barograms have been reduced to this standard. Indirect comparisons of the barometer with the Kew Standard have indicated that the barometer reads on the average 0·004 inch below the Kew Standard. It so happens that this is exactly the average amount by which the readings of Newman's barometer have been over-reduced for temperature. No corrections have consequently been applied to the readings of this barometer. The pressure normals published in the Meteorology of the Bombay Presidency, were based on the data for the years 1844 and 1848 to 1870 and also those for June to December of 1847, whereas those published in the Appendix to the Observatory Volume for 1898-99 were based on the data for the years 1873 to 1896 that is to say on those obtained from the self-recording instruments. We had therefore three periods to deal with 1844 to 1870 (with gaps), 1873 to 1896, and 1897 to 1920, each period comprising roughly 24 years. The daily means for the three periods showed such close agreement with each other that it was decided to attach equal weights to the observations made in the three periods. The daily means for the combined period were calculated in the usual manner, but the mean diurnal variations were obtained by adding together the mean hourly inequalities at each hour for the three periods and dividing by 3. The barometer was always read 7 minutes after the full hour of the local mean time; the hourly inequalities therefore refer to 7 minutes past the civil hours. The results are presented

in Table I and Table II. The diurnal variations for the combined period differ very little from those published in the Observatory Volume for 1898-99; the expressions given for them in terms of the Bessel's coefficients therefore hold for the recalculated variations.

3. Temperature of the Air.

Temperature depends so much on the exposure of the thermometers that it was decided to utilise only the data obtained from the thermograph during the years 1873 to 1920, which formed an unbroken series. The errors of the standard dry bulb and wet bulb thermometers were tested in 1875 at fourteen points by comparison with a Kew Standard and was found within 0°·1 of the truth. In the 40 years which elapsed between 1878 and 1917 the zero of the standard dry bulb changed from 32°·6 to 33°·0 and of the wet bulb from 32°·5 to 33°·0. In obtaining the daily means, properly graded corrections for this change were applied. The mean diurnal variations based on the data for the years 1873 to 1896 were published in the Observatory Volume for 1898-99 and those based on the data for the years 1897 to 1920 were calculated separately. As each period covered 24 years, the mean diurnal inequalities for the combined period were obtained by taking the mean of the mean diurnal inequalities of the two periods. The thermometers were always read 2 minutes after the full hour; the diurnal variations for any hour therefore refer to this instant. The results are given in Tables III and IV. The revised daily means and the diurnal variations are found to differ by very small quantities from those published in the Observatory Volume, 1898-99. The expressions for the diurnal variations in terms of the Bessel's Coefficients given in that volume may therefore be used for all purposes.

A standard Stevenson Screen was installed in the open space to the south-west of the thermograph shed and comparative observations of the thermometers in the screen, the thatched shed and the thermograph shed were made with the help of an Assmann Psychrometer from August 1924. The following table gives the mean differences obtained by comparative observations of Dry Bulb and Wet Bulb temperatures in Stevenson Screen, Thatched Shed and Thermograph Shed, taken during the years 1924 to 1928:—

Height of thermometers above ground in different sheds:—

	Dry bulb.	Wet bulb.
Stevenson Screen	4′ 4½″	4′ 4″
Thatched Shed	4′ 8″	4′ 7½″
Thermograph Shed	10′ 0″	10′ 0″

Mean 1924-28.	Thermometer.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
		°	°	°	°	°	°	°	°	°	°	°	°	°
Stev. Screen minus	D. B.	−0·4	−0·6	−0·6	−0·3	−0·1	+0·1	+0·2	+0·1	−0·1	−0·2	−0·1	−0·2	−0·2
Thatched Shed	W. B.	−0·9	−0·7	−0·7	−0·4	−0·3	−0·2	0·0	−0·1	−0·2	−0·4	−0·5	−0·6	−0·4
Stev. Screen minus	D. B.	+0·3	+0·1	+0·2	+0·4	+0·4	+0·2	+0·2	+0·2	+0·3	+0·2	+0·2	+0·3	+0·2
Thermo. Shed	W. B.	−0·2	−0·2	−0·3	−0·2	−0·2	0·0	+0·2	0·0	+0·1	−0·1	−0·3	−0·2	−0·1
Thermo Shed minus	D. B.	−0·7	−0·7	−0·8	−0·7	−0·4	−0·1	0·0	−0·2	−0·4	−0·4	−0·4	−0·5	−0·4
Thatched Shed	W. B.	−0·6	−0·6	−0·4	−0·2	−0·1	−0·2	−0·2	−0·1	−0·3	−0·3	−0·2	−0·4	−0·3

The differences are due partly to the different exposures of the thermometers and partly to different heights of their bulbs above the ground.

4. Pressure of Vapour.

The tables used at Bombay from the earliest time for the calculation of vapour pressure differ appreciably from those used generally by the Indian Meteorological Department and given in the publication entitled "Tables for the Reduction of Meteorological Observations in India". It seemed desirable that Bombay should use the tables which the department have adopted after careful consideration. The recalculation of the entire series of data for the years 1873 to 1920 seemed out of the question as this would have involved

an enormous amount of labour. The difficulties were consequently met by applying suitable corrections, which were obtained in the following manner. The vapour pressures corresponding to the monthly means of dry bulb and wet bulb temperatures for all the years 1873 to 1920 at each of the five observational hours 6, 10, 14, 16, 22 were calculated first from the Bombay tables and then from the departmental tables and their differences obtained. The mean of these differences was taken as the correction to be applied to the daily normal vapour pressures for the month obtained from the Bombay records. It has been checked by working out several concrete cases that the corrections so determined for converting vapour pressure data obtained from one table to those obtained from the other closely approximate to the true differences. Tables V and VI give respectively the daily means and the diurnal variations of the pressure of vapour at Bombay. On account of the application of the corrections mentioned above, the figures given in these two tables differ considerably from those given in the corresponding tables of the Observatory Volume, 1898-99.

5. Relative Humidity.

Hourly values of relative humidity were not systematically calculated at Bombay for publication. They are however widely used in weather reports and other departmental publications. It is therefore of considerable importance that the hourly normals of this element should be available for use. They are presented in Tables VII and VIII and were obtained by an indirect process. The normal relative humidity for any day was obtained by dividing the normal pressure of vapour for that day by the maximum vapour tension corresponding to the normal air temperature of the day. It was found out by working out a few concrete instances that this method gives very nearly the same result as would be obtained by adding together the mean relative humidities of the day in all the years and dividing by the number of the years. The hourly inequalities of relative humidity were derived by calculating the hourly normals of relative humidity from the hourly normals of pressure of vapour and air temperature for each month of the year and tabulating the algebraical excess of each hour over the mean of 24 hours for the month.

6. Wind Velocity (by Beckley's Anemograph).

The measurement of wind velocity is influenced by the surrounding buildings and trees, that is to say, the exposure of the instrument, by the height of the instrument above ground and also by the instrument itself. It was therefore decided to calculate the normals separately for each instrument. As already remarked the Robinson-Beckley anemograph was installed in June 1867 and remained in use till October 1907 when it was replaced by a new instrument of the same pattern and by the same makers. The height of the cups was 58 feet above ground, and 100 feet above the mean sea level. Till 1910 the readings of this instrument were over-estimated on account of the use of the original instrumental factor 3, which was subsequently reduced to 2·2. In obtaining the daily means and the diurnal inequalities (Tables IX and X) the data for the years 1867 to 1910 were corrected by the factor 0·733.

7. Wind Velocity (by Dine's Anemograph).

A Dines' Anemograph has been in action in the Colaba Observatory since February 1897, with its vane 58 feet 6 inches above the ground and six inches above the cups of Robinson-Beckley. The daily means and the hourly inequalities of the wind velocity recorded by this instrument during the years 1897 to 1920 are shown in the Tables XI and XII.

A new Dines' instrument (velocity and direction) was installed in January, 1924, on the anemometer tower with its vane at a height of 27 feet above the level of Robinson-Beckley's cups. The following table gives the results of the comparative observations during 1924-29 of the three wind instruments.

Ratio of Wind Velocities (1924-29).	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Means. October to February.	Means. March to May.	Means. June to September.	Means. Year.
New Dines to Old Dines.	1·55	1·55	1·46	1·49	1·58	1·61	1·84	1·85	1·73	1·63	1·63	1·57	1·59	1·51	1·76	1·63
New Dines to Rob. Beckley.	1·45	1·46	1·38	1·37	1·45	1·59	1·74	1·73	1·62	1·51	1·56	1·45	1·49	1·40	1·65	1·52
Old Dines to Rob. Beckley.	0·95	0·94	0·95	0·94	0·97	0·95	0·95	0·96	0·95	0·94	0·96	0·94	0·95	0·95	0·95	0·95

8. Wind Direction.

The normals have been based on the data furnished by the Beckley's Anemograph during the years 1867 to 1920. In obtaining the daily means, the mean north or south and east or west components of wind were calculated for each day of the year; the sum of each day for each of the components from 1867 to 1910 was then corrected by the factor ·733 and the corrected sum added to the corresponding sum of the subsequent years and the result divided by the number of years involved. For diurnal variations, the sum of the inequalities for each hour from 1867 to 1910 was corrected by ·733 and added to the sum of the inequalities for that hour during the subsequent years and divided by the total number of years. The results are presented in Tables XIII, XIV, XV and XVI.

9. Cloudiness.

Observations of the extent of cloudy sky have been taken at the hours 6, 10, 14, 16 and 22 since 1847. Till 1885, the figure 8·0 used to represent the condition when the whole sky was cloudy; this figure was changed to 10·0 in the next year. The data for the earlier years were retabulated in terms of the scale in vogue since 1886 and these together with those obtained during the years 1886 to 1920 were utilised for calculating the normal cloudiness given in Table XVII.

10. Solar and Nocturnal Radiation.

A solar radiation thermometer (black-bulb in vacuo) was under observation from 1877 to 1920. The reading was taken every day at 8 hrs. and 16 hrs. The monthly mean readings as well as the monthly mean of the monthly maximum readings for all the years have been given in Table XVII (*A*).

A nocturnal radiation thermometer (grass minimum thermometer) was regularly exposed every night in an open space of the Observatory compound from 1875 to 1920, and readings were taken every day at 8 hrs. The monthly mean radiation temperatures as well as monthly mean of the lowest readings in the different months for the entire period of observations have been given in Table XVII (*B*).

11. Underground Thermometers.

Five thermometers by Newman of London with their bulbs at the respective depths below the surface of the ground of 1, 9, 20, 60 and 132 inches were regularly observed, the two former five times a day at the usual observational hours and the three latter once a day at 14 hrs. from 1847 to 1920. The 9-inch thermometer was found broken in October 1912 and was replaced by another thermometer (No. 203096 by C. F. Casella) in 1914. The errors of the thermometers were not determined when they were installed. The readings are, therefore, all uncorrected for the thermometer errors.

The thermometers were, however, removed in February 1928 and the errors of the graduations determined on the 18th February 1928 by comparison with a standard thermometer (with N. P. L. certificate) in water bath. The errors thus obtained are given below:—

Thermometer.	Error of graduation.	Thermometer.	Error of graduation.
	°F.		°F.
Newman 1 inch	−0·8	Newman 60 inches	−2·1
Casella 9 inches	−1·0	Newman 132 inches	+0·9
Newman 20 inches	−2·0		

Table XVII (*C*) gives the mean monthly values of temperature at different depths, uncorrected for the errors of the thermometers. In preparing this table the data from 1847 to 1920 have been used.

The thermometers remained sunk in the soil for 80 years. It is safe to assume that the corrections given above are applicable to the data during the last 10 years of their history. For the sake of comparison a second table Table XVII (*D*) of the monthly mean values based on the data for 1915-24, after correcting them for the thermometer errors has been given.

12. Rainfall.

Normal rainfall of each day of the year derived from the actual rainfall of the year's 1847 to 1870, is tabulated on page 80 of the 'Meteorology of the Bombay Presidency. On page 11 of the Appendix to the Observatory Volume, 1898-99, we find similar figures based on the observations during the years 1873 to 1896. The figures in the two tables differ widely from each other and the reasons are not far to seek. A reference to the table given below will show that in the years 1847—1870, the average annual rainfall was 70·81 inches, whereas during the period 1873 to 1896, the average annual rainfall was as high as 75·78 inches. The large difference in the average annual rainfall during the two periods accounts for the differences in the two tables of normal rainfall referred to above. It is remarkable that during the subsequent period 1897—1920, the average annual rainfall was only 65·04 inches, considerably less than the corresponding figures during the previous two periods.

Mean Rainfall.													
Period.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
	in.	in.	in.	in.	in.	in.	in.	in.	in.	n.	in.	in.	in.
1847—1870.	0·030	0·007	0·002	0·046	0·545	20·832	24·260	12·748	9·526	2·294	0·445	0·054	70·809
1873—1896.	0·122	0·036	0·020	0·005	0·626	20·130	25·070	14·644	11·512	2·197	0·462	0·059	75·783
1897—1920.	0·084	0·139	0·102	0·077	0·877	18·081	21·631	12·249	9·827	1·679	0·267	0·037	65·041
Mean .	0·09	0·06	0·04	0·04	0·68	19·68	23·95	13·21	10·29	2·06	0·39	0·05	70·54

Mean yearly total for the periods 1847 to 1870 and 1873 to 1920 is 70·54″.

Mean yearly total for the period 1873 to 1920 is 70·41″.

The rainfall normals given in Table XVIII were based on the data for the years 1873—1920. A series of smoothing processes were adopted in obtaining these figures. First the average fall of rain for each day was calculated. The 365 days' averages were then arranged in a line and under them and between each pair were placed the means of every successive pair giving 365 new means. The second, third, fourth, fifth and sixth smoothed means were similarly calculated from the first, second, etc., smoothed means respectively. The value adopted as the normal of each day was the mean of its own and of the seven preceding and seven succeeding smoothed means in the sixth operation.

In obtaining the above table, the data for the earlier years 1847—1870 have been completely ignored. The rainfall figures obtained during these years appear to be quite reliable, for, rainfall measurements in the Colaba Observatory have been made since 1847 by means of a standard Newman raingauge placed near the ground. The period 1847—1870 comprises twenty-four years and 1873—1920 forty-eight years and the best method of combining the two periods without going through the elaborate process of smoothing operations afresh, is obviously to give double weight to the normal figures for the years 1873—1920 and single weight to the figures for the years 1847—1870 and take their means. Table XIX has been prepared in this way; the monthly total was made to agree with the actual mean monthly rainfall during the years 1847—1920 (omitting 1871 and 1872) by spreading over the differences. This table having been based on the observations for 72 years would obviously be preferred to the previous one.

13. Essential features observed during the years 1846 to 1922.

Table XX gives the actual mean, maximum, minimum, and the extreme range for (1) individual hours, (2) daily means, and (3) monthly means in each of the years 1846 to 1922 for the following elements—

(1) Barometric pressure,

(2) Temperature of the Air,

(3) Pressure of Vapour,

and also the mean maximum, the mean minimum and the mean range of the temperature of the air in each of the years 1873 to 1920.

The actual monthly and annual rainfall, the number of rainy days, the maximum fall in one day and its time of occurrence and also the maximum fall in one hour and its time of occurrence for each of the years 1846 to 1922 are tabulated in Table XXI.

Table XXII gives the annual velocity, mean resultant direction, maximum mean hourly velocity, maximum mean daily velocity and the maximum mean monthly velocity of wind and also the annual means of the temperature of the ground (uncorrected for thermometer errors) at the depths of (1) 1 inch, (2) 9 inches, (3) 20 inches, (4) 60 inches and (5) 132 inches.

S. K. BANERJI,
Meteorologist, Bombay.

Colaba Observatory,
The 11th December, 1925.

Climatological Tables.

Colaba Observatory.

TABLE I.

Normal barometric pressure at 32° Fahrenheit for each day of the year, based on hourly barometric readings for 72 years ending with 1920.

Date.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sep.	Oct.	Nov.	Dec.
	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
1	29·947	29·935	29·886	29·832	29·777	29·710	29·661	29·677	29·745	29·805	29·851	29·923
2	·946	·935	·889	·830	·777	·710	·656	·674	·742	·806	·850	·923
3	·946	·934	·885	·830	·779	·696	·657	·679	·748	·808	·859	·928
4	·948	·933	·886	·825	·777	·693	·657	·691	·749	·814	·866	·925
5	·955	·932	·886	·823	·777	·684	·655	·698	·750	·812	·868	·926
6	·951	·932	·891	·817	·776	·689	·654	·693	·751	·809	·866	·922
7	·951	·934	·888	·811	·774	·665	·653	·688	·754	·821	·869	·926
8	·947	·938	·881	·807	·774	·653	·657	·693	·758	·830	·884	·926
9	·951	·926	·882	·810	·777	·646	·660	·709	·756	·829	·891	·925
10	·950	·926	·880	·815	·781	·640	·659	·711	·758	·832	·888	·926
11	·952	·928	·881	·810	·780	·634	·656	·708	·760	·825	·886	·925
12	·945	·929	·877	·806	·778	·637	·651	·711	·770	·827	·891	·927
13	·941	·918	·876	·807	·777	·635	·651	·714	·770	·823	·900	·929
14	·940	·916	·872	·808	·778	·640	·651	·714	·777	·829	·903	·933
15	·948	·913	·861	·806	·777	·642	·652	·720	·780	·827	·903	·936
16	·951	·914	·865	·799	·783	·639	·663	·731	·774	·826	·905	·940
17	·946	·916	·868	·797	·778	·634	·648	·728	·776	·826	·906	·946
18	·947	·930	·868	·794	·773	·635	·649	·723	·780	·832	·907	·947
19	·943	·916	·869	·794	·769	·648	·653	·723	·785	·839	·907	·945
20	·937	·916	·853	·795	·761	·653	·659	·725	·786	·836	·910	·946
21	·940	·908	·851	·794	·755	·655	·661	·730	·792	·840	·912	·947
22	·941	·899	·850	·789	·747	·658	·656	·732	·799	·836	·907	·945
23	·946	·898	·847	·787	·746	·667	·650	·731	·802	·835	·912	·947
24	·937	·901	·845	·783	·741	·667	·651	·731	·801	·836	·910	·954
25	·933	·901	·853	·788	·737	·667	·656	·731	·798	·841	·912	·957
26	·935	·897	·852	·792	·736	·664	·660	·731	·803	·851	·910	·952
27	·938	·888	·846	·790	·733	·663	·662	·735	·804	·861	·914	·950
28	·932	·876	·840	·787	·732	·662	·661	·739	·805	·863	·923	·948
29	·933	*869	·843	·778	·725	·669	·669	·741	·801	·866	·925	·949
30	·933		·841	·779	·720	·671	·676	·739	·805	·857	·923	·951
31	·932		·834		·716		·676	·742		·853		·950
Mean .	29·943	29·918	29·862	29·803	29·762	29·680	29·657	29·716	29·776	29·832	29·895	29·938
Annual variation.	+·130	+·105	+·049	—·010	—·051	—·153	—·156	—·097	—·037	+·019	+·082	+·125

*Mean of 18 leap years. Annual mean —29·813 In.

TABLE II.

Normal diurnal variation of barometric pressure for each month of the year derived from the hourly readings of the barometer for 72 years ending with 1920.

Local mean time.		Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sep.	Oct.	Nov.	Dec.
Hrs.	mts.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
0	7	+·004	+·007	+·008	+·005	+·003	+·008	+·008	+·006	+·004	+·001	·000	+·002
1	7	—·007	—·006	—·007	—·007	—·011	—·009	—·010	—·011	—·011	—·014	—·013	—·009
2	7	—·019	—·020	—·021	—·020	—·023	—·022	—·023	—·025	—·024	—·024	—·024	—·020
3	7	—·028	—·028	—·027	—·026	—·026	—·028	—·030	—·032	—·030	—·026	—·029	—·028
4	7	—·028	—·029	—·026	—·022	—·020	—·025	—·030	—·031	—·028	—·023	—·025	—·026
5	7	—·019	—·019	—·014	—·009	—·010	+·018	—·024	—·023	—·017	—·010	—·012	—·016
6	7	—·002	·000	+·005	+·009	+·009	·000	—·008	—·008	—·002	+·010	+·009	+·001
7	7	+·023	+·024	+·029	+·031	+·030	+·017	+·007	+·009	+·019	+·032	+·032	+·026
8	7	+·048	+·047	+·051	+·053	+·046	+·030	+·023	+·025	+·040	+·051	+·053	+·051
9	7	+·063	+·065	+·064	+·063	+·054	+·038	+·031	+·037	+·049	+·062	+·067	+·067
10	7	+·066	+·068	+·065	+·059	+·052	+·039	+·034	+·040	+·049	+·058	+·060	+·063
11	7	+·047	+·050	+·049	+·047	+·042	+·032	+·030	+·034	+·039	+·036	+·038	+·043
12	7	+·015	+·020	+·023	+·026	+·026	+·021	+·020	+·020	+·018	+·008	+·007	+·011
13	7	—·017	—·011	—·007	—·003	+·001	+·004	+·006	+·003	—·007	—·021	—·017	—·021
14	7	—·040	—·037	—·033	—·029	—·020	—·013	—·008	—·014	—·028	—·042	—·043	—·043
15	7	—·051	—·052	—·052	—·048	—·039	—·030	—·022	—·027	—·043	—·054	—·053	—·053
16	7	—·051	—·053	—·055	—·057	—·050	—·039	—·032	—·035	—·045	—·051	—·051	—·052
17	7	—·043	—·045	—·050	—·054	—·047	—·037	—·030	—·030	—·036	—·040	—·040	—·042
18	7	—·029	—·034	—·039	—·040	—·035	—·026	—·020	—·019	—·023	—·025	—·024	—·026
19	7	—·008	—·015	—·020	—·023	—·020	—·016	—·005	—·004	—·005	—·004	—·002	—·004
20	7	+·011	+·007	·000	—·004	—·003	+·006	+·009	+·010	+·012	+·015	+·015	+·013
21	7	+·023	+·019	+·017	+·013	+·011	+·018	+·020	+·024	+·026	+·023	+·023	+·024
22	7	+·023	+·023	+·022	+·020	+·019	+·025	+·027	+·029	+·027	+·022	+·023	+·024
23	7	+·014	+·016	+·017	+·015	+·014	+·021	+·021	+·022	+·019	+·013	+·013	+·014

TABLE III

Normal temperature in degrees Fahrenheit for each day of the year from dry bulb thermograms for the years 1873 to 1920.

Date.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sep.	Oct.	Nov.	Dec.
	°	°	°	°	°	°	°	°	°	°	°	°
1	74·6	73·3	76·4	80·4	83·1	85·3	81·5	80·1	79·6	80·8	80·5	77·3
2	74·2	73·4	76·5	80·3	83·1	84·9	81·6	80·2	79·7	80·7	80·4	77·3
3	73·8	73·3	76·4	80·3	83·1	84·9	81·6	80·0	79·8	80·8	80·3	77·0
4	73·9	73·4	76·5	80·4	83·2	84·8	81·4	80·1	80·1	80·8	80·2	76·7
5	74·1	73·3	76·4	80·5	83·4	84·7	81·3	80·2	80·3	80·8	80·1	76·4
6	74·3	73·2	76·7	81·0	83·5	84·6	81·2	80·3	79·9	80·9	80·0	76·3
7	74·7	73·4	76·8	81·3	83·6	84·3	81·4	80·2	79·6	81·0	80·1	76·3
8	74·6	73·6	76·9	81·0	83·7	84·0	81·3	80·2	79·9	81·2	79·9	76·2
9	74·5	73·8	77·1	81·0	83·7	83·6	81·2	80·2	79·8	81·3	79·9	76·3
10	74·2	73·7	77·3	80·9	83·8	83·4	81·1	80·2	79·8	81·4	79·6	76·0
11	74·0	73·6	77·6	81·1	83·9	83·1	81·1	80·2	79·8	81·5	79·5	75·8
12	73·7	73·8	77·9	81·3	84·0	82·9	81·1	80·3	80·0	81·5	79·3	75·6
13	73·6	74·1	78·0	81·7	84·2	83·0	81·0	80·1	80·0	81·5	79·4	75·7
14	73·9	74·5	78·2	81·9	84·2	83·0	81·2	80·1	80·2	81·5	79·3	75·7
15	73·9	74·7	78·2	81·9	84·3	82·8	81·1	80·0	80·0	81·5	79·2	75·5
16	73·5	74·5	78·3	81·9	84·3	82·6	80·7	80·2	79·8	81·4	79·1	75·6
17	73·5	74·3	78·4	81·9	84·3	82·4	80·8	80·3	79·8	81·4	78·9	75·7
18	73·6	74·1	78·6	82·1	84·4	82·2	80·7	80·4	79·9	81·2	78·9	75·8
19	73·8	74·5	78·5	82·3	84·5	82·2	80·7	80·3	80·0	81·1	78·8	75·8
20	74·1	74·8	78·6	82·2	84·7	82·4	80·6	80·1	80·0	81·0	78·6	76·7
21	74·0	75·2	78·8	82·2	84·7	82·5	80·4	80·1	80·0	80·9	78·5	76·4
22	73·9	75·4	79·0	82·2	84·8	82·1	80·5	79·9	80·0	81·1	78·3	76·2
23	73·8	75·6	79·2	82·3	85·0	82·2	80·4	79·9	80·0	81·1	77·9	75·2
24	73·6	75·7	79·3	82·5	84·9	82·0	80·5	80·0	80·0	81·1	77·7	75·2
25	73·7	75·8	79·6	82·7	84·8	81·9	80·5	80·0	80·1	81·1	77·5	74·8
26	73·8	76·0	79·8	82·6	85·1	81·8	80·5	80·1	80·3	80·8	77·7	74·6
27	73·7	76·1	79·9	82·8	85·3	81·9	80·6	80·0	80·3	80·7	77·7	74·6
28	73·6	76·3	80·0	83·0	85·2	81·9	80·5	80·0	80·6	80·7	77·8	74·7
29	73·4	*76·7	80·1	82·9	85·1	81·9	80·3	79·8	80·7	80·6	77·8	74·9
30	73·4		80·3	83·0	85·2	81·7	80·3	79·6	80·6	80·5	77·6	74·9
31	73·3		80·4		85·4		80·3	79·6		80·4		74·8
Mean	73·9	74·4	78·2	81·7	84·3	83·0	80·9	80·1	80·0	81·0	79·0	75·7
Annual variation.	—5·4	—4·9	—1·1	+2·4	+5·0	+3·7	+1·8	+0·8	+0·7	+1·7	—0·3	—3·6

*Mean of 11 leap years.

Annual mean —79·3.

TABLE IV.

Normal diurnal variation of temperature in degrees Fahrenheit for each month of the year derived from the dry bulb thermograms for the years 1873 to 1920.

Local mean time.		Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sep.	Oct.	Nov.	Dec.
Hrs.	Mts.	°	°	°	°	°	°	°	°	°	°	°	°
0	2	—2·4	—2·3	—2·1	—2·1	—2·1	—1·1	—0·7	—0·9	—1·1	—2·0	—2·5	—2·6
1	2	—2·8	—2·7	—2·4	—2·4	—2·3	—1·3	—0·9	—1·0	—1·3	—2·3	—2·8	—2·9
2	2	—3·1	—3·1	—2·7	—2·7	—2·5	—1·5	—1·0	—1·1	—1·5	—2·5	—3·1	—3·3
3	2	—3·5	—3·5	—3·2	—3·1	—2·7	—1·7	—1·1	—1·3	—1·7	—2·8	—3·5	—3·6
4	2	—3·9	—3·8	—3·6	—3·4	—2·9	—1·8	—1·1	—1·3	—1·9	—3·1	—3·7	—3·9
5	2	—4·3	—4·2	—3·9	—3·7	—3·1	—1·9	—1·3	—1·5	—2·1	—3·3	—4·1	—4·3
6	2	—4·5	—4·6	—4·3	—3·8	—3·0	—1·9	—1·2	—1·4	—1·1	—3·5	—4·4	—4·5
7	2	—4·7	—4·7	—3·7	—2·4	—1·7	—1·3	—0·9	—1·1	—1·7	—2·9	—4·0	—4·5
8	2	—3·3	—2·8	—1·5	—0·5	—0·2	—0·5	—0·3	—0·5	—0·7	—1·5	—2·5	—3·1
9	2	—1·5	—0·8	+0·3	+1·0	+1·0	+0·5	+0·2	+0·2	+0·3	—0·1	—1·4	—1·4
10	2	+0·8	+1·5	+2·1	+2·3	+2·1	+1·3	+0·9	+0·9	+1·1	+1·6	+1·5	+0·9
11	2	+2·9	+3·3	+3·2	+3·1	+2·9	+1·9	+1·3	+1·5	+1·7	+2·9	+3·4	+3·1
12	2	+4·7	+4·6	+4·1	+3·8	+3·5	+2·3	+1·6	+1·9	+2·3	+3·9	+5·0	+4·0
13	2	+5·8	+5·1	+4·5	+4·1	+3·8	+2·5	+1·7	+1·9	+2·5	+4·3	+5·7	+4·1
14	2	+5·9	+5·5	+4·7	+4·2	+4·0	+2·5	+1·8	+2·0	+2·8	+4·6	+5·9	+4·4
15	2	+5·7	+5·2	+4·5	+4·0	+3·7	+2·3	+1·5	+1·7	+2·5	+4·2	+5·4	+4·5
16	2	+5·0	+4·6	+3·9	+3·5	+3·1	+1·9	+1·1	+1·5	+2·2	+3·8	+4·3	+4·1
17	2	+3·4	+3·3	+2·8	+2·4	+2·1	+1·3	+0·7	+0·8	+1·3	+2·1	+2·4	+2·1
18	2	+1·8	+1·5	+1·1	+0·7	+0·5	+0·3	+0·1	+0·1	+0·4	+0·9	+1·3	+1·7
19	2	+0·9	+0·7	+0·2	+0·3	—0·6	—0·3	—0·3	—0·3	—0·1	+0·1	+0·7	+0·9
20	2	+0·5	+0·2	—0·3	—0·7	—1·0	—0·5	—0·3	—0·5	—0·4	—0·3	+0·1	+0·3
21	2	—0·3	—0·3	—0·5	—1·1	—1·2	—0·8	—0·5	—0·6	—0·6	—0·7	—0·5	—0·5
22	2	—1·1	—1·1	—1·1	—1·3	—1·6	—0·9	—0·6	—0·6	—0·7	—1·2	—1·4	—1·4
23	2	—1·9	—1·7	—1·7	—1·7	—1·7	—1·1	—0·7	—0·8	—1·0	—1·7	—2·1	—2·2

TABLE V.

Normal pressure of vapour for each day of the year deduced from the dry and wet bulb thermograms for the years 1873 to 1920.

Date.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sep.	Oct.	Nov.	Dec.
	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
1	0·631	0·539	0·639	0·746	0·841	0·897	0·901	0·874	0·850	0·805	0·742	0·623
2	·569	·541	·644	·747	·838	·898	·900	·876	·849	·865	·747	·627
3	·559	·555	·648	·757	·845	·905	·906	·875	·815	·8 9	·748	·611
4	·569	·563	·639	·763	·846	·904	·902	·876	·848	·866	·742	·609
5	·582	·545	·645	·770	·839	·909	·902	·875	·850	·869	·745	·612
6	·588	·550	·662	·775	·844	·911	·901	·873	·842	·871	·737	·609
7	·590	·548	·665	·769	·845	·920	·903	·872	·843	·867	·721	·613
8	·592	·552	·669	·772	·844	·913	·903	·870	·846	·887	·734	·625
9	·580	·554	·671	·775	·850	·911	·899	·869	·847	·866	·730	·632
10	·570	·555	·669	·784	·851	·914	·898	·867	·846	·861	·728	·615
11	·569	·547	·670	·784	·851	·914	·894	·864	·843	·857	·721	·601
12	·568	·563	·676	·779	·857	·918	·893	·862	·843	·857	·709	·595
13	·567	·584	·673	·781	·864	·918	·892	·860	·844	·854	·693	·591
14	·576	·600	·686	·787	·863	·923	·896	·859	·843	·849	·698	·592
15	·571	·607	·693	·807	·862	·918	·891	·857	·841	·846	·695	·593
16	·567	·606	·705	·815	·857	·915	·889	·860	·845	·844	·694	·597
17	·564	·589	·712	·826	·855	·917	·890	·861	·847	·835	·687	·609
18	·568	·567	·695	·827	·858	·914	·889	·858	·849	·820	·677	·600
19	·572	·572	·699	·814	·862	·908	·890	·857	·853	·815	·665	·600
20	·577	·579	·705	·819	·870	·908	·889	·859	·858	·820	·665	·599
21	·583	·598	·715	·819	·869	·908	·885	·856	·861	·814	·658	·590
22	·588	·615	·728	·817	·878	·906	·887	·856	·860	·812	·658	·593
23	·574	·622	·719	·820	·883	·905	·885	·856	·856	·808	·634	·601
24	·563	·621	·718	·827	·876	·904	·885	·857	·855	·805	·628	·593
25	·561	·622	·732	·831	·883	·908	·885	·856	·861	·798	·647	·573
26	·572	·623	·734	·838	·889	·907	·882	·855	·866	·791	·645	·581
27	·571	·631	·739	·836	·894	·907	·883	·856	·867	·789	·645	·584
28	·561	·627	·746	·843	·894	·903	·881	·853	·868	·776	·656	·586
29	·546	·628*	·760	·846	·895	·903	·880	·852	·870	·746	·657	·593
30	·540		·761	·846	·895	·900	·876	·852	·866	·749	·646	·609
31	·564		·763		·889		·875	·851		·742		·594
Mean	·571	·581	·696	·801	·864	·909	·891	·862	·852	·829	·692	·601
Annual variation.	—·191	—·181	—·066	+·038	+·102	+·148	+·129	+·100	+·090	+·067	—·070	—·161

*Mean of 11 leap years.

Annual mean—·762 In.

TABLE VI.

Normal diurnal variation of pressure of vapour for each month of the year deduced from the dry and wet bulb thermograms for the years 1873 to 1920.

Local mean time.		Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sep	Oct	Nov.	Dec.
Hrs.	Mts.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
0	2	—·001	—·001	+·004	·000	—·006	—·007	—·007	—·009	—·012	—·004	+·004	·004
1	2	—·003	—·001	+·003	—·005	—·010	—·011	—·011	—·011	—·015	—·009	—·001	—·001
2	2	—·007	—·005	·000	—·009	—·013	—·013	—·013	—·013	—·014	—·013	—·005	—·009
3	2	—·017	—·011	—·005	—·015	—·019	—·017	—·015	—·015	—·018	—·018	—·015	—·020
4	2	—·025	—·019	—·012	—·019	—·021	—·019	—·015	—·016	—·017	—·022	—·021	—·027
5	2	—·035	—·028	—·021	—·025	—·023	—·021	—·018	—·018	—·018	—·028	—·031	—·035
6	2	—·041	—·037	—·026	—·023	—·017	—·018	—·015	—·015	—·015	—·029	—·035	—·040
7	2	—·045	—·043	—·023	—·013	—·011	—·013	—·011	—·010	—·005	—·019	—·033	—·041
8	2	—·035	—·034	—·017	—·008	—·005	—·003	+·001	+·002	+·009	—·009	—·027	—·033
9	2	—·029	—·031	—·015	—·005	—·001	+·003	+·007	+·009	+·018	—·003	—·025	—·031
10	2	—·021	—·023	—·011	—·005	+·001	+·013	+·018	+·023	+·027	+·003	—·022	—·024
11	2	—·025	—·025	—·002	+·013	+·006	+·018	+·021	+·025	+·027	—·004	—·024	—·031
12	2	—·029	—·010	+·013	+·020	+·011	+·021	+·022	+·027	+·027	—·005	—·040	—·043
13	2	—·013	+·011	+·021	+·020	+·013	+·021	+·022	+·025	+·025	+·006	—·029	—·033
14	2	+·015	+·031	+·024	+·019	+·017	+·022	+·023	+·024	+·025	+·013	—·002	—·005
15	2	+·032	+·037	+·020	+·013	+·015	+·017	+·015	+·016	+·016	+·023	+·021	+·026
16	2	+·045	+·039	+·015	+·009	+·016	+·015	+·011	+·011	+·010	+·028	+·040	+·049
17	2	+·049	+·035	+·009	+·004	+·013	+·007	+·002	—·001	—·003	+·023	+·044	+·058
18	2	+·050	+·031	+·002	—·001	+·007	+·001	—·004	—·007	—·010	+·019	+·043	+·063
19	2	+·049	+·025	+·001	—·002	+·004	—·002	—·007	—·010	—·013	+·017	+·052	+·063
20	2	+·045	+·028	—·005	—·005	+·006	—·003	—·007	—·009	—·012	+·019	+·055	+·059
21	2	+·031	+·020	+·006	+·005	+·004	—·004	—·007	—·009	—·013	+·010	+·039	+·039
22	2	+·012	+·011	+·007	+·008	+·005	—·003	—·005	—·007	—·009	+·002	+·013	+·011
23	2	—·001	+·003	+·005	+·004	+·001	—·006	—·008	—·009	—·011	—·005	+·003	·000

TABLE VII.

Normal relative humidity for each day of the year derived from data obtained during the years 1873 to 1920.

Date.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sep.	Oct.	Nov.	Dec.
	%	%	%	%	%	%	%	%	%	%	%	%
1	68	66	70	72	74	74	84	85	84	83	71	68
2	67	66	71	72	74	75	83	85	84	83	72	67
3	67	68	71	73	75	75	84	86	83	83	72	66
4	68	68	70	74	74	75	84	85	83	82	72	66
5	70	66	71	74	73	76	84	85	82	83	72	67
6	69	67	72	73	74	76	85	85	83	83	72	67
7	69	67	72	73	73	77	84	85	83	82	71	68
8	69	67	72	73	73	78	85	84	83	81	72	69
9	68	67	72	73	74	79	84	84	83	81	72	70
10	67	67	71	74	73	80	85	84	83	80	72	69
11	68	66	71	74	73	81	84	84	83	80	72	67
12	68	68	71	73	74	81	84	83	83	80	71	67
13	68	69	70	73	74	81	84	84	83	79	69	67
14	69	70	71	72	74	82	84	84	82	79	70	67
15	68	71	72	74	73	82	84	84	82	79	70	67
16	69	71	73	75	73	82	85	85	83	79	70	67
17	68	68	73	76	73	83	85	83	83	78	70	68
18	69	67	71	75	73	83	85	83	83	78	69	67
19	69	67	72	74	73	83	85	83	83	77	68	67
20	69	67	72	75	73	82	85	84	84	78	68	67
21	69	68	73	75	73	82	85	83	84	77	69	67
22	70	70	74	74	73	83	85	84	84	77	68	68
23	69	71	72	74	73	82	85	84	84	76	66	69
24	68	70	72	75	73	83	85	84	84	76	65	68
25	68	70	72	74	74	83	85	84	84	75	69	66
26	69	69	72	75	74	84	85	83	84	75	68	68
27	69	70	72	75	74	83	85	84	84	75	68	68
28	68	69	73	75	74	83	86	83	83	74	69	68
29	66		74	75	74	83	86	84	83	72	69	69
30	67		74	75	74	83	85	84	83	71	68	69
31	69		74		73		85	84		72		69
Mean	68	68	72	74	74	81	85	84	83	78	70	68
Annual variation.	−7	−7	−3	−1	−1	+6	+10	+9	+8	+3	−5	−7

Annual mean—75%

TABLE VIII.

Normal diurnal variation of relative humidity for each month of the year derived from data obtained during the years 1873 to 1920.

Local mean time.		Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sep.	Oct.	Nov.	Dec.
Hrs.	Mts.	%	%	%	%	%	%	%	%	%	%	%	%
0	2	+5	+6	+6	+5	+6	+2	+1	+2	+2	+4	+6	+6
1	2	+6	+6	+6	+5	+4	+2	+2	+2	+2	+5	+7	+6
2	2	+6	+6	+7	+6	+4	+3	+1	+2	+3	+5	+7	+6
3	2	+5	+6	+8	+6	+4	+3	+1	+2	+3	+5	+7	+6
4	2	+5	+6	+8	+7	+5	+3	+1	+2	+4	+5	+7	+6
5	2	+5	+6	+8	+7	+5	+3	+1	+2	+4	+5	+6	+6
6	2	+5	+6	+7	+7	+5	+3	+1	+2	+5	+6	+7	+5
7	2	+5	+6	+7	+5	+3	+1	+1	+2	+4	+5	+6	+6
8	2	+3	+2	+2	0	−1	+1	+1	+2	+3	+2	+3	+3
9	2	−1	−3	−2	−3	−3	−1	0	0	+2	−1	−1	−1
10	2	−6	−7	−6	−5	−5	−3	−1	0	0	−4	−6	−5
11	2	−10	−10	−7	−8	−7	−4	−2	−2	−2	−8	−7	−10
12	2	−14	−11	−8	−7	−7	−4	−2	−3	−3	−10	−14	−15
13	2	−14	−10	−8	−7	−8	−5	−3	−3	−4	−10	−14	−16
14	2	−11	−9	−8	−8	−8	−5	−3	−3	−5	−10	−12	−14
15	2	−8	−8	−8	−8	−8	−5	−3	−3	−5	−8	−10	−10
16	2	−7	−6	−7	−7	−6	−4	−2	−3	−5	−7	−6	−6
17	2	−3	−4	−5	−5	−4	−3	−2	−2	−4	−4	−1	−1
18	2	+1	−1	−2	−4	−1	−1	−1	−1	−2	−1	+2	+3
19	2	+3	+1	0	+1	+1	0	0	0	−1	+1	+3	+5
20	2	+3	+2	+1	+2	+2	+1	0	0	0	+2	+5	+6
21	2	+4	+2	+2	+3	+3	+1	0	+1	+1	+2	+5	+5
22	2	+3	+3	+4	+4	+4	+2	0	+1	+1	+3	+5	+4
23	2	+4	+4	+5	+5	+4	+2	+1	+1	+2	+3	+5	+5

TABLE IX.

Normal velocity of wind in miles per hour for each day of the year based on Robinson-Beckley's anemograms from 1867 to 1920.

Date.	Jany.	Feby	March.	April.	May.	June.	July.	Aug.	Sep.	Oct.	Nov.	Dec.
1	6·7	8·0	7·2	8·0	7·2	7·7	10·6	13·0	8·6	6·9	6·3	6·7
2	6·6	7·7	7·2	7·8	7·0	8·1	10·8	12·4	8·7	6·7	6·2	6·6
3	6·7	7·4	7·6	7·6	7·2	8·4	10·8	12·3	8·4	6·8	6·5	6·8
4	7·2	7·1	7·5	7·7	6·9	8·1	11·4	12·5	8·2	6·7	6·3	6·7
5	7·0	7·4	7·2	7·2	6·9	8·3	11·8	12·2	8·6	6·8	6·6	6·7
6	6·7	7·7	6·9	7·5	6·8	8·2	11·7	12·0	8·0	7·0	6·7	6·7
7	6·8	7·7	7·2	7·7	6·8	8·6	11·6	12·1	8·3	6·5	6·7	6·5
8	6·6	7·5	7·1	7·3	6·8	9·6	11·5	12·0	8·3	6·0	6·4	6·5
9	6·8	7·5	7·2	7·4	7·1	11·1	11·6	11·2	8·2	5·9	6·6	6·4
10	6·8	7·0	7·4	7·4	7·3	11·1	11·8	10·9	7·7	6·0	6·5	6·7
11	6·7	7·3	7·4	7·7	7·0	10·9	12·1	10·9	7·5	5·9	6·4	7·0
12	6·7	7·1	7·3	8·4	7·0	10·7	11·9	10·7	7·5	6·1	6·5	7·2
13	6·5	6·7	7·2	8·2	7·2	10·4	12·1	10·8	7·3	6·1	6·8	6·9
14	6·5	6·4	7·5	8·0	7·0	10·3	12·5	11·1	7·4	6·8	6·4	6·9
15	6·7	6·7	7·8	7·4	6·9	11·3	13·1	11·3	7·1	6·8	6·4	6·7
16	7·0	7·1	7·6	7·0	7·1	11·6	12·9	10·9	7·1	6·7	6·4	6·8
17	6·9	7·7	7·5	6·9	6·8	11·3	13·0	10·5	6·8	5·8	6·4	6·7
18	7·1	7·7	7·8	6·6	6·7	11·1	12·9	10·1	6·9	6·2	6·5	6·9
19	7·1	7·6	7·8	7·1	7·0	11·2	12·7	9·8	7·2	6·4	6·6	6·9
20	6·7	7·5	7·6	7·0	7·1	11·1	12·4	10·1	6·9	6·0	7·2	6·8
21	6·4	7·4	7·3	7·3	6·9	11·0	12·1	10·2	6·7	6·4	6·9	6·8
22	6·7	7·1	7·7	7·3	7·1	11·1	12·6	10·1	6·5	6·9	7·1	6·8
23	7·1	7·0	7·7	7·5	7·5	10·9	12·7	9·9	6·6	6·1	7·1	6·3
24	7·4	7·0	7·8	7·5	7·8	11·0	12·9	9·7	6·9	6·4	6·8	6·5
25	7·2	7·4	7·6	7·6	7·3	11·2	13·3	9·7	6·7	6·6	6·4	6·9
26	6·9	7·3	7·6	7·5	6·8	10·8	13·4	9·3	6·6	6·1	6·6	6·6
27	6·9	7·3	8·2	7·3	7·3	10·9	13·1	8·7	6·2	6·1	6·8	6·8
28	7·1	7·2	7·4	6·9	7·5	10·7	13·1	8·9	5·9	6·3	6·6	6·6
29	7·4	7·5*	7·2	6·8	7·4	10·5	12·9	8·8	6·3	6·5	6·5	6·5
30	7·5		7·3	7·0	7·1	10·5	12·9	8·7	6·5	6·2	6·7	6·7
31	7·6		8·1		7·3		13·0	8·6		6·0		6·7
Mean	6·9	7·3	7·5	7·4	7·1	10·3	12·3	10·6	7·3	6·3	6·6	6·7
Annual variation	—1·1	—0·7	—0·5	—0·6	—0·9	+2·3	+3·4	+2·6	—0·7	—1·7	—1·4	—1·3

*Mean of 13 leap years. Annual mean—8·0 miles.

TABLE X.

Normal diurnal variation of velocity of wind in miles per hour for each month of the year based on Robinson-Beckley's anemograms from 1867 to 1920.

Local mean time.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sep.	Oct.	Nov.	Dec.
Hrs.												
0	—2·2	—2·2	—1·3	—1·2	+1·1	—0·3	—0·1	—0·2	—0·8	—1·3	—2·0	—2·2
1	—2·1	—2·0	—1·4	—1·7	—1·4	—0·3	+0·1	—0·1	—0·9	—1·3	—1·6	—1·8
2	—1·9	—1·8	—1·7	—2·3	—1·6	—0·3	+0·3	+0·1	—0·8	—1·1	—1·1	—1·4
3	—1·5	—1·7	—2·1	—2·6	—1·9	—0·5	+0·3	+0·2	—0·7	—1·0	—0·6	—0·8
4	—1·1	—1·6	—2·3	—2·8	—2·2	—0·6	+0·3	+0·2	—0·6	—0·9	—0·1	—0·2
5	—0·9	—1·7	—2·5	—3·0	—2·5	—0·8	+0·1	0·0	—0·7	—0·8	+0·3	+0·1
6	—0·7	—1·7	—2·6	—3·2	—2·5	—0·8	0·0	—0·1	—0·7	—0·8	+0·6	+0·5
7	—0·7	—1·7	—2·4	—2·7	—2·1	—0·8	—0·1	—0·2	—0·5	—0·4	+0·8	+0·6
8	—0·5	—1·5	—2·0	—2·3	—1·8	—0·6	—0·2	—0·2	—0·5	—0·4	+0·8	+0·8
9	—0·6	—1·5	—1·8	—1·8	—0·9	—0·4	—0·3	—0·3	—0·5	—0·7	0·0	+0·2
10	—1·1	—1·5	—1·0	—0·4	+0·2	+0·1	0·0	—0·1	—0·3	—1·2	—1·1	—0·8
11	—1·5	—0·9	+0·5	+1·0	+0·9	+0·2	0·0	+0·1	+0·2	—1·0	—1·8	—1·8
12	—0·4	+0·8	+2·1	+2·4	+1·9	+0·5	+0·1	+0·2	+0·9	+0·2	—1·2	—1·5
13	+0·9	+2·2	+3·4	+3·6	+2·8	+0·9	+0·3	+0·7	+1·6	+1·4	—0·1	—0·5
14	+2·1	+3·2	+4·2	+4·6	+3·4	+1·2	+0·4	+0·9	+2·0	+2·4	+1·0	+0·7
15	+2·9	+3·9	+4·6	+4·9	+3·7	+1·4	+0·5	+0·9	+2·2	+2·9	+2·0	+1·7
16	+3·2	+4·1	+4·2	+4·6	+3·3	+1·2	+0·4	+0·7	+1·9	+2·8	+2·3	+2·3
17	+3·2	+3·7	+3·4	+3·5	+2·5	+0·7	+0·1	+0·3	+1·2	+2·3	+2·4	+2·6
18	+3·2	+3·2	+2·3	+2·2	+1·5	+0·2	—0·1	—0·1	+0·6	+1·7	+2·5	+2·9
19	+2·8	+2·5	+1·0	+0·8	+0·4	0·0	—0·4	—0·4	0·0	+1·0	+1·9	+2·5
20	+1·4	+1·0	—0·4	—0·4	—0·2	—0·2	—0·5	—0·7	—0·6	—0·1	+0·4	+0·9
21	—0·6	—0·9	—1·4	—0·9	—0·6	—0·2	—0·6	—0·8	—0·9	—1·0	—1·2	—0·9
22	—1·6	—1·8	—1·5	—0·8	—0·8	—0·3	—0·4	—0·8	—1·0	—1·3	—1·9	—1·8
23	—2·1	—2·1	—1·4	—1·0	—1·0	—0·3	—0·3	—0·7	—1·0	—1·4	—2·2	—2·2

TABLE XI.

Normal velocity of wind in miles per hour for each day of the year based on Dines' Anemograms from 1897 to 1920.

Date.	Jany	Feby.	March.	April.	May.	June.	July.	Aug.	Sep.	Oct.	Nov.	Dec
1	5·8	7·0	6·2	6·8	5·9	5·8	7·8	10·4	6·8	6·6	5·1	5·9
2	5·8	6·6	6·0	6·5	5·6	6·4	8·4	10·1	6·7	6·9	5·1	5·8
3	5·7	6·0	6·4	6·6	5·8	7·4	8·1	10·0	6·6	6·3	5·1	6·0
4	5·5	5·9	6·6	6·4	5·7	7·0	8·5	10·0	6·8	5·5	5·5	5·7
5	5·7	6·8	6·3	5·9	5·9	6·0	9·0	9·8	6·9	5·7	5·6	5·8
6	5·5	6·6	5·7	6·2	5·8	6·2	8·9	9·7	6·6	6·0	5·6	5·8
7	5·7	6·2	6·1	6·3	5·6	6·7	9·1	10·3	6·8	5·1	5·7	5·5
8	5·7	6·0	6·4	6·1	5·7	7·9	9·2	10·0	6·8	5·1	5·6	5·4
9	5·9	6·5	6·7	6·4	5·8	9·1	8·9	8·8	6·5	5·0	5·9	5·5
10	5·7	6·5	6·4	6·6	6·5	8·9	9·1	8·8	6·3	5·4	5·6	5·7
11	5·6	6·4	6·4	6·9	6·3	9·4	9·3	8·8	6·1	4·9	5·4	5·6
12	6·0	6·3	6·6	7·1	6·0	9·2	9·6	8·8	6·2	5·0	5·7	6·3
13	5·4	5·5	6·9	6·9	6·3	9·1	9·2	8·7	5·8	4·9	5·9	6·1
14	5·8	5·6	6·5	6·6	5·9	8·9	9·0	9·0	5·8	5·0	5·2	6·3
15	6·1	5·8	6·6	6·2	5·7	9·3	9·6	8·8	5·6	5·1	5·3	6·2
16	5·1	6·3	6·4	5·7	5·6	9·4	9·5	8·0	5·9	4·7	5·7	6·0
17	6·0	6·8	6·6	5·6	5·5	9·1	9·6	7·3	5·6	5·2	5·4	6·0
18	6·1	7·0	6·6	5·3	5·9	8·9	9·6	6·6	5·3	5·2	5·6	5·7
19	5·9	6·8	6·9	5·5	6·1	8·5	9·6	6·8	5·7	5·3	5·5	5·9
20	5·4	6·7	6·8	5·9	6·1	8·9	8·8	7·8	5·5	5·1	5·7	6·1
21	5·5	6·6	6·2	6·3	5·9	9·0	8·9	8·1	5·0	5·6	5·8	6·0
22	5·9	6·3	6·1	6·3	5·8	9·0	9·2	8·4	5·2	5·2	6·1	5·7
23	6·4	6·3	6·5	6·9	6·2	8·1	9·5	8·4	5·2	5·5	6·1	5·5
24	6·7	6·2	6·7	6·8	6·9	8·0	9·5	8·4	5·6	5·6	6·1	5·9
25	6·5	6·5	6·4	6·9	6·1	8·5	9·8	8·4	5·6	6·1	5·3	6·1
26	6·1	6·4	6·2	6·9	5·7	8·2	10·1	8·0	5·2	5·3	5·6	6·0
27	5·8	6·3	6·7	6·7	5·9	8·3	10·0	7·4	5·1	5·4	5·8	6·3
28	6·0	6·2	5·8	6·5	5·9	7·9	9·9	7·3	4·7	5·4	5·7	5·9
29	6·3	7·1*	6·5	5·8	5·8	7·9	10·0	7·3	5·5	5·6	5·6	5·5
30	6·4		6·2	6·1	5·6	8·1	10·0	6·9	6·1	5·4	5·9	5·4
31	6·4		6·7		5·6		10·2	6·9		4·7		5·5
Mean	5·9	6·4	6·4	6·4	5·9	8·2	9·3	8·5	5·9	5·4	5·6	5·8
Annual variation.	—0·7	—0·2	—0·2	—0·2	—0·7	+1·6	+2·7	+1·9	—0·7	—1·2	—1·0	—0·8

*Based on five leap years

Annual mean 6·6 miles.

TABLE XII.

Normal diurnal variation of velocity of wind in miles per hour for each month of the year based on Dine's anemograms from 1897 to 1920.

Local mean time.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sep.	Oct.	Nov.	Dec.
Hrs.												
0	—2·0	—2·1	—1·2	—0·9	—1·0	—0·2	—0·1	—0·2	—0·8	—1·1	—1·8	—2·0
1	—1·9	—2·0	—1·3	—1·4	—1·3	—0·2	0·0	—0·1	—0·8	—1·1	—1·5	—1·7
2	—1·7	—1·7	—1·5	—1·9	—1·6	—0·2	+0·1	0·0	—0·8	—1·0	—1·2	—1·3
3	—1·3	—1·5	—1·9	—2·3	—1·7	—0·3	+0·2	+0·1	—0·8	—1·0	—0·6	—0·9
4	—1·0	—1·4	—2·1	—2·5	—1·9	—0·4	+0·2	+0·1	—0·6	—0·9	—0·2	—0·4
5	—0·8	—1·5	—2·2	—2·7	—2·0	—0·3	+0·1	0·0	—0·6	—0·7	+0·1	—0·1
6	—0·8	—1·5	—2·1	—2·8	—2·1	—0·5	+0·1	—0·1	—0·6	—0·5	+0·3	+0·2
7	—0·7	—1·6	—2·0	—2·3	—1·8	—0·5	0·0	—0·2	—0·3	—0·3	+0·6	+0·4
8	—0·4	—1·3	—1·5	—1·9	—1·3	—0·4	—0·1	—0·2	—0·3	—0·1	+0·7	+0·5
9	—0·4	—1·1	—1·5	—1·6	—0·8	—0·2	—0·1	—0·2	—0·4	—0·4	+0·2	+0·2
10	—0·9	—1·4	—1·1	—0·6	—0·1	—0·1	0·0	—0·1	—0·5	—1·0	—1·0	—0·7
11	—1·2	—0·6	+0·5	+0·7	+0·7	+0·1	+0·1	+0·2	—0·1	—0·8	—1·5	—1·3
12	—0·5	+0·8	+1·8	+2·0	+1·6	+0·3	+0·2	+0·6	+0·4	+0·2	—0·9	—1·1
13	+0·7	+1·9	+2·8	+3·1	+2·3	+0·6	+0·1	+0·6	+1·3	+1·2	0·0	—0·3
14	+1·7	+2·7	+3·6	+3·8	+2·8	+0·8	+0·2	+0·7	+1·7	+2·1	+1·0	+0·7
15	+2·5	+3·3	+4·0	+4·1	+3·1	+0·9	+0·3	+0·8	+1·9	+2·5	+1·6	+1·5
16	+2·7	+3·5	+3·7	+3·9	+3·0	+0·9	+0·4	+0·7	+1·8	+2·5	+2·1	+2·0
17	+2·8	+3·2	+3·1	+3·0	+2·3	+0·4	+0·1	+0·3	+1·2	+2·0	+2·2	+2·4
18	+2·9	+2·9	+2·1	+1·9	+1·3	+0·1	—0·1	—0·1	+0·7	+1·6	+2·3	+2·7
19	+2·6	+2·2	+1·0	+0·7	+0·4	—0·1	—0·3	—0·3	+0·1	+0·8	+1·7	+2·4
20	+1·3	+1·0	—0·3	—0·2	—0·2	—0·1	—0·5	—0·6	—0·4	—0·2	+0·4	+0·9
21	—0·5	—0·8	—1·2	—0·7	—0·7	—0·2	—0·5	—0·7	—0·6	—0·9	—1·2	—0·7
22	—1·5	—1·7	—1·3	—0·7	—0·8	—0·3	—0·5	—0·7	—0·8	—1·1	—1·7	—1·5
23	—1·8	—2·0	—1·2	—0·8	—0·9	—0·2	—0·2	—0·5	—0·8	—1·2	—1·9	—1·9

TABLE XIII.

Normal North or South component of wind in miles per hour for each day of the year deduced from Robinson-Beckley's anemograms for the years 1867 to 1920.

Date.	Jany.	Feby.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1	4·3N	6·1N	4·5N	4·2N	1·7N	1·5S	3·6S	2·9S	0·6S	1·9N	3·4N	4·2N
2	4·2N	5·3N	4·4N	4·2N	2·0N	1·4S	3·2S	3·1S	0·8S	2·1N	3·1N	3·7N
3	4·4N	5·1N	4·4N	3·9N	2·0N	1·2S	3·9S	3·3S	1·1S	1·6N	3·3N	4·0N
4	4·9N	4·0N	4·8N	4·0N	1·1N	1·9S	3·5S	3·0S	1·0S	1·1N	3·3N	3·9N
5	4·9N	5·0N	4·6N	3·8N	1·2N	2·0S	3·9S	2·2S	0·7S	0·9N	3·5N	4·1N
6	4·4N	5·2N	4·1N	3·9N	0·9N	1·9S	3·7S	2·6S	0·4S	0·1N	3·4N	3·7N
7	4·4N	5·3N	4·5N	3·8N	0·5N	2·7S	3·9S	2·3S	0·4S	0·5N	2·7N	3·5N
8	4·4N	5·3N	4·0N	2·9N	0·5N	4·6S	3·9S	2·6S	0·2S	1·6N	2·9N	3·6N
9	4·5N	4·9N	4·2N	3·0N	0·1N	0·3S	3·7S	2·3S	0·1N	2·6N	3·0N	3·7N
10	4·4N	4·7N	4·5N	3·2N	0·5N	5·0S	3·8S	2·2S	0·1N	2·8N	3·4N	4·2N
11	4·4N	5·1N	4·4N	3·1N	0·8N	5·2S	3·7S	2·3S	0·1N	3·1N	3·3N	4·1N
12	4·3N	4·0N	3·8N	3·5N	0·9N	4·7S	3·5S	2·6S	0·2S	3·2N	3·2N	3·9N
13	4·2N	3·9N	3·8N	4·2N	1·3N	4·8S	3·6S	2·1S	0	2·9N	3·4N	3·7N
14	4·2N	3·7N	4·1N	4·2N	0·9N	4·5S	3·2S	2·0S	0·1S	2·6N	3·6N	4·3N
15	4·1N	3·9N	4·4N	3·5N	0·7N	5·9S	3·4S	1·6S	0·6S	2·4N	3·3N	4·4N
16	4·7N	4·4N	4·1N	2·4N	0·5N	5·6S	3·3S	1·8S	0·4S	2·8N	3·3N	3·8N
17	4·8N	5·4N	3·8N	1·9N	0·9N	5·4S	3·1S	1·7S	0	2·3N	3·4N	4·0N
18	5·0N	5·6N	4·7N	1·7N	0·9N	4·2S	3·3S	1·4S	0·7N	2·6N	3·7N	4·2N
19	4·8N	5·6N	4·3N	1·9N	0·9N	4·4S	3·6S	1·7S	1·1N	2·1N	3·2N	4·3N
20	4·3N	5·4N	4·0N	1·9N	0·3N	4·1S	3·1S	1·6S	0·4N	1·9N	3·2N	4·4N
21	4·1N	5·0N	3·6N	2·3N	0·4N	4·5S	3·1S	1·5S	0·4N	2·1N	3·6N	4·4N
22	4·4N	4·5N	3·6N	2·6N	0·8N	4·4S	3·0S	1·4S	0·6S	1·6N	3·8N	3·9N
23	5·0N	4·6N	4·1N	2·9N	0·6N	4·9S	3·0S	1·5S	0·6N	1·6N	4·0N	3·9N
24	5·4N	4·5N	3·8N	2·9N	0·3N	4·7S	2·4S	1·2S	0·7N	1·4N	3·9N	3·4N
25	4·9N	5·2N	3·4N	2·8N	0·2N	4·2S	2·9S	1·0S	1·0N	1·8N	3·9N	3·1N
26	4·6N	4·8N	4·1N	1·8N	0·3S	4·0S	3·5S	1·2S	1·0N	1·8N	3·9N	4·1N
27	4·6N	4·6N	4·4N	1·5N	0·7S	3·5S	3·7S	1·4S	1·5N	2·4N	3·8N	4·3N
28	4·7N	4·9N	3·4N	1·7N	0·8S	3·6S	3·8S	0·7S	1·6N	3·2N	3·6N	4·0N
29	5·2N	*5·1N	2·9N	1·8N	0·9S	3·9S	3·3S	0·1S	1·4N	3·7N	3·6N	4·0N
30	5·3N		3·0N	1·7N	1·0S	3·8S	3·2S	0·4S	2·0N	3·5N	3·8N	4·3N
31	5·4N		4·1N		0·9S		3·2S	0·7S		3·2N		4·5N
Monthly mean	4·6N	4·9N	4·1N	2·9N	0·5N	4·0S	3·4S	1·8S	0·3N	2·2N	3·4N	4·0N
Annual variation	3·1N	3·4N	2·6N	1·4N	1·0S	5·5S	4·9S	3·3S	1·2S	0·7N	1·9N	2·5N

*Mean of 13 leap years. Annual mean —1·5 N.

TABLE XIV.

Normal diurnal variation of North or South component of wind in miles per hour for each month of the year derived from Robinson-Beckley's anemograms for the years 1867 to 1920.

Hour	Jany.	Feby.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
0 to 1	1·1S	1·0S	0·1S	0·3N	0·1N	0·4S	0·5S	0·6S	0·6S	0·8S	1·3S	1·3S
1 to 2	1·3S	1·0S	0·1S	0·1N	0·3S	0·4S	0·4S	0·6S	0·6S	0·9S	1·3S	1·4S
2 to 3	1·2S	0·8S	0·1S	0·3S	0	0·1S	0·2S	0·4S	0·6S	0·9S	1·1S	1·3S
3 to 4	1·1S	0·8S	0·3S	0·7S	0·1S	0·1N	0·3S	0·4S	0·5S	0·8S	0·9S	1·0S
4 to 5	1·0S	0·8S	0·6S	1·1S	0·2S	0·3N	0·1S	0·3S	0·6S	0·8S	0·7S	0·8S
5 to 6	1·0S	1·1S	1·0S	1·5S	0·4S	0·5N	0·1N	0·1S	0·7S	0·9S	0·7S	0·8S
6 to 7	1·2S	1·4S	1·3S	1·7S	0·6S	0·4N	0	0·1S	0·8S	1·1S	0·7S	0·8S
7 to 8	1·5S	1·9S	1·9S	1·7S	0·7S	0·3N	0	0·1S	1·0S	1·2S	1·0S	1·1S
8 to 9	1·7S	1·9S	1·8S	1·7S	0·8S	0·1N	0·1N	0·2S	1·0S	1·2S	1·1S	1·3S
9 to 10	1·7S	2·0S	1·7S	1·8S	0·8S	0	0·1N	0·1S	1·0S	1·3S	1·4S	1·2S
10 to 11	1·8S	1·8S	1·3S	1·3S	0·8S	0·3S	0	0·2S	0·8S	1·5S	1·7S	1·8S
11 to 12	1·6S	1·2S	0·7S	0·8S	0·5S	0·2S	0	0·1S	0·4S	1·3S	1·7S	1·8S
12 to 13	1·0S	0·4S	0·7S	0·1S	0·3S	0·2S	0·1N	0·1N	0·2N	0·6S	1·3S	1·4S
13 to 14	0·7S	0·3N	0·7N	0·6N	0·2N	0	0·2N	0·3N	0·1N	0·2N	0·7S	0·8S
14 to 15	0·5N	1·0N	1·4N	1·4N	0·6N	0·1N	0·3N	0·5N	1·1N	1·0N	0·1N	0·1S
15 to 16	1·4N	1·9N	2·1N	2·0N	0·9N	0·2N	0·4N	0·6N	1·3N	1·7N	1·1N	0·9N
16 to 17	2·2N	2·6N	2·4N	2·2N	1·0N	0·3N	0·4N	0·6N	1·6N	2·3N	2·0N	1·8N
17 to 18	2·8N	3·0N	2·8N	2·0N	1·0N	0·3N	0·4N	0·7N	1·4N	2·5N	2·9N	2·8N
18 to 19	3·5N	3·1N	2·0N	1·6N	0·8N	0·2N	0·2N	0·6N	1·2N	2·6N	3·6N	3·9N
19 to 20	3·6N	3·0N	1·4N	1·0N	0·5N	0	0·1N	0·4N	0·9N	2·1N	3·5N	4·0N
20 to 21	2·7N	2·0N	0·4N	0·5N	0·2N	0·1S	0	0·1N	0·6N	1·2N	2·4N	2·8N
21 to 22	1·1N	0·3N	0·5S	0·3N	0·1N	0·2S	0·2S	0·1S	0·2N	0·4N	1·0N	1·3N
22 to 23	0·1N	0·4S	0·6S	0·3N	0	0·4S	0·4S	0·2S	0·1S	0·2S	0	0·2N
23 to 24	0·6S	0·8S	0·4S	0·2N	0·1S	0·4S	0·5S	0·4S	0·3S	0·6S	0·8S	0·7S

TABLE XV.

Normal East or West component of wind in miles per hour for each day of the year deduced from Robinson-Beckley's anemograms for the years 1867 to 1920.

Date.	Jany.	Feby.	March.	April.	May.	June.	July.	Augt.	Septr.	Octr.	Novr.	Decr.
	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.
1	0	1·7W	3·2W	4·2W	5·0W	4·6W	8·4W	12·3W	7·1W	2·3W	0·1E	0·7E
2	0·2E	1·5W	2·7W	4·5W	4·9W	4·6W	8·9W	11·6W	7·0W	2·3W	0·2E	1·1E
3	0·1E	1·3W	3·2W	4·3W	4·7W	5·1W	8·1W	11·3W	6·6W	1·7W	0·5E	1·0E
4	0·2W	1·4W	3·1W	4·2W	4·7W	4·1W	9·3W	11·6W	6·7W	1·7W	0·4E	1·0E
5	0·3W	1·6W	3·0W	4·1W	4·9W	4·0W	9·3W	11·3W	7·3W	1·7W	0·5E	1·1E
6	0·1W	1·6W	3·3W	4·3W	5·0W	3·9W	9·3W	11·2W	6·6W	1·5W	0·9E	1·1E
7	0·2W	1·9W	3·3W	4·6W	5·1W	3·8W	9·4W	11·4W	6·4W	1·2W	1·1E	1·1E
8	0·4W	1·9W	3·4W	4·4W	5·2W	2·6W	9·2W	11·2W	6·4W	1·9W	0·9E	1·2E
9	0·1W	1·9W	3·5W	4·3W	5·2W	2·1W	9·7W	10·3W	6·1W	1·4W	0·7E	0·6E
10	0·3W	2·1W	3·4W	4·4W	5·4W	2·5W	9·9W	10·0W	5·5W	1·0W	0·4E	0·5E
11	0·4W	1·9W	3·3W	4·5W	5·4W	3·5W	10·2W	9·9W	5·5W	0·8W	0·3E	1·0E
12	0·5W	1·6W	3·2W	4·7W	5·4W	4·7W	9·9W	9·6W	5·3W	0·9W	0·5E	0·6E
13	0·5W	1·5W	3·3W	4·7W	5·6W	5·1W	10·3W	9·7W	5·2W	0·5W	0·8E	0·6E
14	0·4W	1·8W	3·4W	4·7W	5·3W	5·3W	11·1W	10·1W	5·0W	0·4W	0·7E	0·6E
15	0·4W	2·0W	3·9W	4·5W	5·7W	5·4W	12·0W	10·5W	4·8W	0·3W	0·8E	0·6E
16	0·5W	2·3W	3·7W	4·2W	5·6W	5·7W	11·6W	10·0W	4·3W	0·5W	0·5E	0·9E
17	0·7W	2·6W	3·7W	4·3W	5·8W	6·2W	11·7W	9·5W	3·8W	0·6W	0·3E	1·0E
18	0·6W	2·4W	3·7W	4·4W	5·6W	7·0W	11·4W	9·3W	4·6W	0·1W	0·7E	1·1E
19	0·4W	2·5W	3·8W	4·6W	5·8W	7·5W	11·1W	8·9W	4·7W	0·2E	0·6E	0·9E
20	0·7W	2·2W	3·8W	4·6W	5·8W	7·9W	11·1W	8·7W	3·7W	0	0·9E	0·9E
21	0·8W	2·0W	3·8W	5·0W	5·8W	7·4W	10·7W	9·1W	3·1W	0·1E	1·2E	0·6E
22	0·8W	2·4W	4·0W	4·9W	5·8W	8·1W	11·4W	9·2W	2·1W	0·1W	1·0E	0·5E
23	1·1W	2·7W	4·0W	5·0W	5·6W	7·5W	11·4W	8·9W	2·7W	0	1·1E	0·2E
24	1·5W	2·6W	4·1W	4·9W	5·1W	7·1W	11·9W	8·8W	2·8W	0·4E	1·2E	0·7E
25	1·4W	2·4W	4·0W	4·9W	5·8W	7·9W	12·1W	8·6W	2·8W	0·2E	0·8E	0·4E
26	1·2W	2·6W	4·1W	4·9W	5·2W	8·4W	11·8W	8·1W	3·2W	0·1E	1·0E	0·1E
27	1·2W	2·8W	4·5W	4·9W	5·2W	8·7W	11·6W	7·6W	2·5W	0·2E	1·5E	0·4E
28	1·3W	2·9W	3·9W	4·8W	5·1W	8·9W	11·8W	8·0W	2·3W	0	1·3E	0·4E
29	1·6W	*2·9W	4·0W	4·7W	5·3W	8·4W	11·9W	7·8W	2·2W	0·2E	1·2E	0
30	1·7W		4·0W	4·8W	5·3W	8·6W	11·9W	7·2W	2·8W	0·1E	0·7E	0·1W
31	1·6W		4·3W		5·2W		12·2W	7·1W		0·3E		0·2W
Monthly mean	0·7W	2·1W	3·6W	4·6W	5·3W	5·9W	10·7W	9·6W	4·7W	0·6W	0·3E	0·7E
Annual variation	3·2E	1·8E	0·3E	0·7W	1·4W	2·0W	6·8W	5·7W	0·8W	3·3E	4·7E	4·6E

*Mean of 13 leap years.

Annual mean 3·2W.

TABLE XVI.

Normal diurnal variation of East or West component of wind in miles per hour for each month of the year derived from Robinson-Beckley's anemograms for the years 1867 to 1920.

Hour.	Jany.	Feby.	March.	April.	May.	June.	July.	Augt.	Septr.	Octr.	Novr.	Decr.
0 to 1	1·5E	1·4E	0·9E	1·3E	1·3E	0·6E	0·3E	0·1E	0·4E	1·4E	0·8E	1·3E
1 to 2	2·0E	1·7E	1·2E	1·9E	1·5E	0·9E	0·1E	0·1E	0·3E	1·7E	2·1E	2·1E
2 to 3	2·2E	2·1E	1·8E	2·7E	1·9E	0·9E	0·2W	0·1W	0·2E	2·2E	2·8E	2·7E
3 to 4	2·9E	2·5E	2·6E	3·4E	2·3E	1·0E	0·1W	0·2W	1·1E	2·6E	3·5E	3·2E
4 to 5	3·5E	3·2E	3·4E	4·2E	2·7E	1·1E	0·1W	0·1W	1·5E	3·0E	3·9E	4·0E
5 to 6	3·9E	3·8E	4·3E	4·7E	3·2E	1·5E	0·2E	0·1E	2·0E	3·5E	4·4E	4·4E
6 to 7	4·4E	4·4E	5·0E	5·0E	3·5E	1·7E	0·3E	0·4E	2·5E	4·0E	4·8E	5·0E
7 to 8	4·8E	5·0E	5·4E	5·1E	4·4E	2·0E	0·5E	0·7E	2·8E	4·5E	5·2E	5·4E
8 to 9	5·3E	5·5E	5·4E	4·4E	2·7E	1·7E	0·6E	0·7E	2·7E	4·5E	5·3E	5·7E
9 to 10	4·9E	5·0E	3·9E	2·6E	1·4E	1·1E	0·5E	0·7E	2·0E	3·8E	4·6E	5·1E
10 to 11	3·5E	2·8E	0·9E	0·5W	0·3W	0·1E	0·1E	0·3E	0·7E	2·2E	3·2E	3·7E
11 to 12	0·6E	0·5W	2·1W	2·4W	1·4W	0·6W	0·1W	0·1W	0·5W	0·4W	0·4E	1·3E
12 to 13	2·4W	3·5W	4·1W	3·8W	2·6W	1·2W	0·4W	0·8W	1·9W	2·9W	1·6W	1·4W
13 to 14	4·6W	5·1W	5·2W	5·0W	3·5W	1·8W	0·6W	0·9W	2·7W	4·7W	4·1W	3·8W
14 to 15	5·7W	5·8W	5·7W	5·7W	4·2W	2·3W	0·7W	1·1W	3·2W	5·8W	5·9W	5·8W
15 to 16	6·2W	6·0W	5·9W	5·8W	4·4W	2·5W	0·9W	1·2W	3·4W	6·0W	6·9W	6·7W
16 to 17	5·9W	5·5W	5·3W	5·3W	5·9W	2·3W	0·8W	1·0W	3·0W	5·4W	6·7W	6·6W
17 to 18	5·2W	4·8W	4·4W	4·3W	3·1W	1·9W	0·5W	0·6W	2·3W	4·2W	5·9W	5·9W
18 to 19	4·5W	3·9W	3·1W	2·9W	2·0W	1·3W	0·2W	0·1W	1·6W	3·1W	5·0W	5·3W
19 to 20	3·7W	2·9W	1·8W	1·4W	0·9W	0·8W	0·1E	0·2E	0·7W	1·9W	4·1W	4·0W
20 to 21	2·3W	1·6W	0·4W	0·2W	0·1W	0·2W	0·4E	0·6E	0	0·8W	2·8W	3·0W
21 to 22	0·7W	0·1E	0·8E	0·4E	0·5E	0·3E	0·6E	0·7E	0·4E	0·1	1·0W	1·2W
22 to 23	0·2E	1·0E	0·8E	0·6E	0·8E	0·5E	0·6E	0·7E	0·6E	0·7E	0	0·2W
23 to 24	1·0E	1·2E	0·7E	0·9E	1·0E	0·8E	0·5E	0·6E	0·8E	1·1E	0·7E	0·5E

TABLE XVII.

Normal extent of cloudy sky (whole sky cloudy=10)based on eye observations made during the years 1847 to 1920.

Month.	Hours.				Mean.
	6	10	14	16	22	
January	1·5	1·6	1·6	1·5	0·8	1·4
February	1·5	1·5	1·2	1·3	0·6	1·2
March	2·3	1·7	1·3	1·3	1·0	1·5
April	3·4	2·1	1·5	1·6	1·7	2·1
May	5·0	3·5	2·7	2·9	3·5	3·5
June	8·2	7·7	7·4	7·6	7·2	7·6
July	9·3	8·9	9·0	9·1	8·5	8·9
August	9·2	8·8	8·6	8·7	8·1	8·7
September	8·0	7·3	6·8	7·0	6·4	7·1
October	5·0	3·8	3·3	3·6	3·3	3·8
November	2·4	2·1	2·2	2·2	1·5	2·1
December	1·8	1·8	1·9	1·9	0·9	1·7
Year	4·2	4·1	4·0	4·1	3·6	4·1

TABLE XVII—A.

Temperature in the Sun in degrees Fahrenheit (1877 to 1920).

	Months.											
	Jany.	Feby.	March.	April.	May.	June.	July.	Augt.	Septr.	Octr.	Novr.	Decr.	Year.
Monthly Means	138·0	138·9	140·7	143·9	145·7	137·5	130·6	133·6	138·1	142·5	142·5	139·5	139·3
Mean of highest values	140·9	142·5	143·5	145·5	146·7	140·4	141·9	141·6	144·5	145·2	144·7	141·9	149·4

TABLE XVII—B.

Grass minimum temprature in degrees Fahrenheit (1875 to 1920).

	Months.											
	Jany.	Feby.	March.	April.	May.	June.	July.	Augt.	Septr.	Octr.	Novr.	Decr.	Year.
Monthly Means	58·7	59·7	65·1	70·7	76·2	76·6	75·2	74·3	73·3	70·5	64·7	60·2	66·6
Mean of lowest values	52·7	52·4	58·9	65·3	71·6	72·3	72·4	72·0	70·4	63·7	58·8	54·2	50·5

TABLE XVII—C.

Ground Temperatures in degrees Fahrenheit at various depths below the surface (uncorrected for instrumental errors).

Depth below ground surface.	Months.													Years included in the calculations of normals.
	Jan.	Feb.	March.	April.	May.	June.	July.	Augt.	Sept.	Octr.	Novr.	Decr.	Year.	
1 inch	75·7	76·6	80·2	83·7	86·3	84·6	82·3	81·5	81·5	82·6	80·7	77·7	81·1	1847 to 1920.
9 inches	77·0	77·3	80·2	83·4	85·8	85·3	83·4	82·4	82·1	82·9	81·3	78·8	81·7	1847 to 1920.
20 inches	80·2	79·9	81·5	84·2	86·5	87·2	85·8	84·7	84·1	84·5	83·8	82·0	83·7	1849 to 1920.
60 inches	83·0	82·5	82·4	83·8	85·3	86·5	86·5	86·5	84·9	84·7	84·6	84·0	84·5	1852 to 1920.
132 inches	83·4	83·0	82·9	83·2	83·9	84·8	85·0	85·0	84·7	84·5	84·3	83·9	84 0	1879 to 1920.

TABLE XVII—D.

Ground Temperatures in degrees Fahrenheit at various depths below the surface (corrected for instrumental errors) (1915 to 1924).

Depth below ground surface.	Months.												
	Jany.	Feby.	March.	April.	May.	June.	July.	Augt.	Septr.	Octr.	Novr.	Decr.	Year.
1 inch	76·5	76·7	81·1	84·1	86·4	85·0	82·5	81·7	81·6	82·8	81·1	77·6	81·4
9 inches	77·4	77·2	80·6	83·8	86·1	86·0	84·0	83·0	82·7	83·3	81·8	78·9	82·1
20 inches	80·1	79·6	81·0	84·3	86·7	87·5	85·9	84·8	84·2	84·5	83·9	81·9	83·7
60 inches	82·1	81·4	81·8	83·0	84·7	85·9	85·7	84·9	84·3	84·1	83·9	83·2	83·7
132 inches	84·4	84·1	84·3	84·7	85·4	85·7	85·7	85·6	85·5	85·4	85·3	84·9	85·1

TABLE XVIII.

Normal rainfall for each day of the year derived from actual observations for the years 1873 to 1920.

Date.	Jany.	Feby.	March.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
	"	"	"	"	"	"	"	"	"	"	"	"
1	..	0·01	..	..	..	0·20	0·81	0·56	0·45	0·18	0·02	0·01
2	..	..	..	..	..	0·23	0·81	0·54	0·45	0·16	0·02	..
3	0·01	..	..	..	..	0·27	0·80	0·53	0·46	0·15	0·02	..
4	..	..	..	..	..	0·29	0·81	0·51	0·46	0·13	0·02	..
5	..	0·01	0·01	..	..	0·33	0·81	0·49	0·45	0·12	0·02	..
6	0·01	..	..	..	..	0·37	0·81	0·48	0·43	0·11	0·02	0·01
7	..	..	..	0·01	..	0·40	0·83	0·47	0·42	0·09	0·02	..
8	..	..	..	..	..	0·44	0·83	0·46	0·40	0·08	0·01	..
9	0·01	0·01	..	..	..	0·49	0·83	0·45	0·39	0·08	0·01	..
10	..	..	0·01	..	..	0·53	0·84	0·43	0·39	0·06	0·01	..
11	..	..	..	..	..	0·58	0·83	0·41	0·40	0·06	0·01	..
12	0·01	..	..	..	..	0·64	0·81	0·39	0·39	0·06	0·01	0·01
13	..	0·01	..	..	..	0·67	0·82	0·38	0·40	0·04	0·01	..
14	..	..	..	0·01	..	0·70	0·82	0·38	0·39	0·04	0·01	..
15	0·01	..	0·01	..	..	0·74	0·81	0·37	0·39	0·04	0·01	..
16	..	0·01	..	..	0·01	0·76	0·81	0·37	0·38	0·03	0·01	..
17	..	..	..	..	0·01	0·78	0·81	0·37	0·37	0·03	0·01	..
18	0·01	..	..	..	0·01	0·81	0·79	0·38	0·35	0·03	0·01	0·01
19	..	..	..	..	0·02	0·81	0·79	0·38	0·34	0·04	0·01	..
20	..	0·01	0·01	..	0·03	0·82	0·78	0·38	0·33	0·04	0·01	..
21	0·01	..	..	0·01	0·03	0·84	0·75	0·39	0·32	0·05	0·01	..
22	..	..	..	..	0·03	0·83	0·75	0·39	0·32	0·04	0·01	..
23	..	..	..	..	0·04	0·84	0·74	0·40	0·31	0·04	0·01	..
24	0·01	0·01	..	..	0·04	0·85	0·72	0·41	0·28	0·04	0·01	0·01
25	..	..	0·01	..	0·04	0·83	0·71	0·43	0·27	0·03	0·01	..
26	..	..	..	..	0·05	0·82	0·70	0·45	0·25	0·03	0·01	..
27	0·01	..	..	..	0·05	0·82	0·68	0·45	0·24	0·03	0·01	..
28	..	0·01	..	0·01	0·07	0·81	0·67	0·45	0·23	0·02	0·01	..
29	..	..	..	..	0·09	0·80	0·64	0·45	0·22	0·02	0·01	..
30	0·01	..	0·01	..	0·10	0·81	0·60	0·45	0·19	0·03	..	..
31	..	..	..		0·13		0·59	0·45		0·02		..
Monthly total	0·10	0·08	0·06	0·04	0·75	19·11	23·80	13·45	10·67	1·94	0·36	0·05

Normal rainfall in the year 70·41".

TABLE XIX.

Normal rainfall for each day of the year derived from actual observations for 72 years ending with 1920.

Date.	Jany.	Feby.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
	"	"	"	"	"	"	"	"	"	"	"	"
1	..	..	..	..	..	0·21	0·76	0·56	0·41	0·18	0·03	0·01
2	..	..	..	..	..	0·25	0·76	0·54	0·42	0·17	0·03	..
3	0·01	..	..	..	..	0·30	0·76	0·51	0·43	0·15	0·02	..
4	..	..	..	..	..	0·33	0·76	0·51	0·43	0·14	0·02	..
5	..	0·01	..	..	..	0·38	0·76	0·49	0·43	0·12	0·02	..
6	0·01	..	..	..	..	0·41	0·78	0·47	0·42	0·12	0·02	0·01
7	..	..	0·01	0·01	..	0·47	0·79	0·45	0·41	0·10	0·02	..
8	..	..	..	..	..	0·49	0·82	0·45	0·39	0·10	0·02	..
9	0·01	0·01	..	..	..	0·53	0·82	0·44	0·39	0·08	0·01	..
10	..	..	..	..	..	0·59	0·83	0·42	0·37	0·08	0·01	..
11	..	..	..	..	..	0·62	0·83	0·42	0·39	0·06	0·01	..
12	0·01	..	..	..	..	0·67	0·83	0·41	0·39	0·07	0·01	0·01
13	..	0·01	..	..	..	0·73	0·83	0·40	0·39	0·05	0·01	..
14	..	..	0·01	0·01	..	0·75	0·83	0·39	0·39	0·05	0·01	..
15	0·01	..	..	..	..	0·79	0·85	0·39	0·39	0·04	0·01	..
16	..	..	..	..	0·01	0·80	0·84	0·39	0·37	0·05	0·01	..
17	..	0·01	..	..	0·01	0·82	0·84	0·38	0·36	0·03	0·01	..
18	0·01	..	..	..	0·01	0·82	0·84	0·39	0·34	0·04	0·01	0·01
19	..	..	..	..	0·01	0·83	0·83	0·39	0·33	0·04	0·01	..
20	..	..	..	..	0·01	0·84	0·82	0·39	0·31	0·04	0·01	..
21	0·01	0·01	0·01	0·01	0·02	0·82	0·80	0·38	0·31	0·03	0·01	..
22	..	..	..	..	0·03	0·82	0·78	0·39	0·30	0·04	0·01	..
23	..	..	..	..	0·03	0·83	0·78	0·39	0·29	0·05	0·01	..
24	0·01	..	..	..	0·03	0·82	0·74	0·39	0·28	0·04	0·01	0·01
25	..	0·01	..	..	0·04	0·83	0·72	0·41	0·26	0·03	0·01	..
26	..	..	..	..	0·04	0·81	0·71	0·41	0·24	0·04	0·01	..
27	0·01	..	..	..	0·05	0·80	0·69	0·42	0·23	0·03	0·01	..
28	..	..	0·01	0·01	0·07	0·78	0·67	0·40	0·22	0·04	0·01	..
29	..	..	..	..	0·08	0·77	0·65	0·41	0·21	0·02	0·01	..
30	..	..	..	..	0·11	0·77	0·62	0·41	0·19	0·03	..	..
31	..	..	..	..	0·13	..	0·61	0·41	..	0·02	..	..
Monthly total	0·09	0·06	0·04	0·04	0·68	19·68	23·95	13·21	10·29	2·06	0·39	0·05

Normal rainfall in the year 70·54".

TABLE XX.—Meteorological.

Years.	Barometric Pressure.										Temperature			
	Individual Hours.			Daily Means.			Monthly Means.			Individual Hours.			
	Annual Means.	Maximum.	Minimum.	Extreme Range.	Maximum.	Minimum.	Range.	Maximum.	Minimum.	Range.	Annual Means.	Maximum.	Minimum.	Extreme Range.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	°	°	°	°
1846	29·809	30·107	29·383	0·724	30·032	·493	0·539	29·993	29·624	0·369	80·5	98·8	63·8	35·0
1847	·797	·075	·456	·619	·017	·498	·519	·917	·621	·296	79·0	94·2	63·3	40·9
1848	·805	·084	·440	·644	·012	·491	·521	·927	·629	·298	79·5	98·0	67·0	41·0
1849	·798	·094	·387	·707	·016	·426	·585	·940	·624	·321	79·9	99·5	68·5	38·0
1850	·808	·079	·464	·615	29·999	·521	·477	·949	·639	·310	79·9	97·0	68·0	37·0
1851	·796	·148	·414	·734	30·056	·482	·574	·936	·599	·339	79·5	98·3	67·3	36·0
1852	·805	·072	·455	·617	·001	·450	·551	·929	·630	·299	80·2	99·4	67·4	38·0
1853	·814	·113	·502	·611	·022	·539	·483	·966	·644	·322	80·0	99·4	68·6	37·8
1854	·804	·111	·484	·626	·021	·504	·517	·936	·618	·318	80·9	98·4	68·0	35·4
1855	·824	·119	·494	·625	·045	·519	·526	·944	·648	·296	80·7	100·3	66·0	35·3
1856	·806	·136	·459	·677	·005	·524	·481	·950	·640	·310	80·6	98·0	63·0	31·6
1857	·808	·105	·507	·598	·039	·541	·498	·981	·640	·341	79·9	100·2	63·0	37·2
1858	·812	·093	·494	·599	·018	·516	·502	·964	·670	·294	80·1	98·9	66·8	34·1
1859	·812	·061	·437	·624	29·994	·492	·502	·954	·626	·328	80·2	98·4	62·0	36·4
1860	·804	·095	·462	·643	30·012	·486	·510	·963	·631	·332	80·0	93·7	59·6	34·1
1861	·797	·053	·422	·624	29·975	·506	·469	·952	·659	·293	79·3	97·0	62·5	34·5
1862	·782	·101	·467	·634	30·017	·511	·506	·920	·620	·300	80·0	94·0	61·4	32·6
1863	·792	·103	·457	·594	·013	·500	·513	·947	·646	·301	79·6	95·0	60·2	34·8
1864	·832	·142	·486	·656	·064	·507	·557	·965	·660	·305	79·9	94·0	60·7	33·3
1865	·811	·109	·456	·653	·039	·496	·543	·972	·656	·316	81·0	99·0	66·1	29·9
1866	·822	·164	·342	·822	·070	·492	·578	·988	·661	·328	78·3	91·8	56·6	35·2
1867	·824	·143	·424	·719	·056	·506	·550	·994	·657	·337	78·8	92·0	61·8	30·2
1868	·836	·131	·344	·787	·063	·414	·649	·983	·673	·310	79·1	92·0	62·2	30·8
1869	·814	·132	·463	·669	·050	·503	·546	·966	·659	·307	79·9	92·4	63·3	29·1
1870	·797	·094	·418	·676	·016	·478	·537	·936	·637	·299	79·0	92·7	62·9	29·8
1871	·805	·068	·456	·612	29·989	·521	·468	·932	·641	·291	80·1	92·3	66·1	27·2
1872	·795	·087	·510	·652	·960	·509	·451	·932	·650	·282	78·9	93·3	60·4	32·9
1873	·811	·095	·449	·655	30·012	·515	·496	·953	·641	·302	78·9	93·2	55·2	38·0
1874	·810	·102	·378	·724	·024	·456	·568	·975	·628	·347	78·3	93·0	60·9	32·1
1875	·808	·090	·464	·615	·015	·500	·515	·956	·652	·296	78·7	91·1	59·1	32·1
1876	·816	·091	·495	·596	·029	·542	·487	·967	·641	·326	79·3	91·4	65·8	25·6
1877	·846	·108	·540	·568	·043	·600	·443	·976	·713	·263	80·3	91·3	63·2	28·1
1878	·800	·106	·467	·639	·022	·517	·505	·953	·654	·299	80·1	94·8	62·8	32·0
1879	·801	·103	·458	·780	·005	·402	·601	·924	·674	·251	78·6	90·5	65·4	31·1
1881	·818	·103	·477	·626	·034	·501	·472	·975	·698	·307	79·5	91·9	60·4	31·6
1882	·820	·120	·504	·616	·041	·540	·501	·993	·677	·286	80·0	92·0	67·1	24·9
1883	·807	·140	·366	·774	·058	·433	·626	·965	·633	·332	79·1	92·1	65·1	27·0
1884	·827	·113	·469	·664	·053	·545	·508	·989	·639	·350	78·8	90·9	62·8	28·1
1885	·826	·137	·419	·717	·054	·472	·581	·994	·648	·345	78·8	92·1	63·6	28·5
1886	·826	·125	·404	·721	·051	·470	·581	·987	·652	·335	79·2	91·8	62·1	29·7
1887	·809	·132	·362	·770	·057	·461	·596	·947	·653	·294	79·5	95·4	59·5	35·9
1888	·818	·130	·408	·724	·060	·466	·594	·935	·662	·273	78·7	92·2	56·9	35·3
1889	·818	·096	·394	·702	·034	·505	·476	·975	·664	·311	80·1	93·8	65·7	28·1
1890	·814	·094	·502	·628	·023	·552	·471	·970	·647	·323	79·6	92·1	66·7	25·4
1891	·834	·094	·505	·589	·023	·552	·471	·947	·632	·315	79·3	91·1	66·9	24·2
1892	·834	·128	·471	·657	·045	·522	·523	·960	·653	·307	79·5	90·8	60·3	30·5
1893	·790	·084	·418	·666	·017	·402	·525	·968	·608	·360	79·9	93·9	64·4	29·5
1894	·815	·081	·432	·649	·014	·518	·496	·968	·648	·320	78·9	93·4	59·5	33·9
1895	·809	·094	·451	·643	·021	·498	·523	·945	·636	·309	79·5	90·4	65·1	25·3
1896	·819	·109	·390	·715	·026	·436	·590	·936	·654	·282	79·6	92·3	62·0	30·3
1897	·820	·094	·356	·738	·019	·407	·612	·953	·618	·335	80·7	92·7	64·8	28·9
1898	·810	·108	·385	·723	·020	·447	·573	·951	·629	·322	79·5	91·3	62·1	29·2
1899	·833	·105	·417	·688	·026	·476	·550	·981	·628	·353	80·3	92·2	64·2	28·0
1900	·833	·104	·436	·668	·026	·496	·529	·994	·660	·294	80·0	91·5	60·5	31·0
1901	·827	·087	·487	·607	·018	·540	·478	·945	·660	·285	80·0	91·8	62·8	29·0
1902	·821	·144	·432	·723	·051	·512	·549	·956	·669	·286	79·8	96·3	59·4	36·9
1903	·813	·157	·402	·755	·052	·460	·592	·982	·692	·290	79·9	93·9	65·3	27·2
1904	·824	·132	·332	·800	·048	·377	·671	·980	·601	·379	78·7	90·9	57·2	33·7
1905	·840	·192	·464	·706	·087	·487	·600	·992	·685	·297	79·8	91·7	62·8	28·9
1906	·820	·090	·359	·731	·112	·609	·503	·976	·679	·297	78·9	92·4	56·8	35·6
1907	·815	·057	·467	·590	·015	·447	·568	·951	·624	·327	79·2	92·6	62·5	30·1
1908	·818	·116	·426	·690	29·989	·522	·467	·931	·645	·286	79·9	92·7	63·5	29·2
1909	·807	·067	·481	·635	30·038	·526	·512	·963	·661	·302	79·0	98·7	61·2	37·5
1910	·799	·111	·331	·780	·003	·516	·493	·921	·646	·275	78·9	91·6	62·4	29·2
1911	·828	·108	·485	·623	·019	·542	·477	·959	·692	·267	79·9	91·4	59·3	32·1
1912	·820	·119	·361	·758	·050	·486	·564	·980	·618	·362	80·4	93·4	65·8	27·6
1913	·822	·220	·408	·812	·156	·461	·695	·970	·631	·339	79·6	93·1	63·8	29·3
1914	·826	·182	·474	·708	·118	·511	·607	30·001	·613	·388	80·2	93·5	62·0	29·5
1915	·818	·112	·439	·673	·040	·510	·530	29·970	·658	·312	80·2	93·0	63·7	29·3
1916	·787	·116	·400	·715	·047	·470	·577	·965	·588	·377	80·0	92·5	59·9	32·6
1917	·792	·120	·412	·708	·045	·470	·575	·944	·628	·316	79·4	91·3	61·4	29·9
1918	·825	·086	·554	·532	·014	·598	·416	·949	·687	·262	79·9	92·7	61·7	31·0
1919	·811	·085	·492	·583	·018	·504	·514	·949	·650	·299	79·7	91·9	62·2	29·7
1920	·809	·076	·398	·678	·006	·442	·564	·937	·637	·300	80·4	94·4	62·6	31·8
1921	·806	·101	·453	·648	·015	·517	·498	·945	·638	·307	79·9	93·9	61·5	32·4
1922	·806	·118	·463	·668	·046	·519	·527	·956	·651	·305	79·8	96·9	62·2	34·7

The data are derived from hourly eye observations during the period 1846—1872
* Determined from readings of the maximum and

Data, 1846—1922.

of the Air.			In degrees Fahrenheit.						Pressure of Vapour.								
Daily Means.			Monthly Means.						Annual Means.	Individual Hours.			Daily Means.			Monthly Means.	
Maximum.	Minimum.	Range	Maximum.	Minimum.	Range.	Mean Maximum.*	Mean Minimum.*	Mean Range.		Maximum.	Minimum.	Extreme Range.	Maximum.	Minimum.	Range.	Maximum.	Minimum.	Range.
16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34
°	°	°	°	°	°	°	°	°	Inches	In.	In.	In.	In.	In.	In.	In.	In.	In.
88·4	72·6	15·8	88·7	76·4	10·3	..	..	..	0·808	1·116	0·318	0·798	1·022	0·478	0·544	0·961	0·612	0·349
89·5	62·2	24·3	83·9	73·7	10·2	..	..	..	·795	·999	·189	·910	0·885	·259	·726	·934	·606	·328
89·7	67·1	19·6	84·6	75·1	9·5	..	..	..	·803	·046	·303	·743	·887	·330	·557	·918	·629	·289
88·6	65·9	20·7	85·2	73·3	11·9	..	..	..	·796	·214	·280	·934	1·060	·351	·709	·928	·588	·341
87·8	68·1	19·7	84·4	72·4	12·0	..	..	..	·784	·076	·270	·806	1·983	·332	·591	·942	·566	·376
88·7	65·6	21·1	84·6	72·2	12·4	..	..	..	·782	·030	·236	·794	·988	·348	·640	·929	·555	·374
88·3	66·7	21·6	86·3	71·9	14·4	..	..	..	·769	·069	·285	·804	·961	·369	·592	·920	·508	·412
89·4	67·0	22·4	86·9	71·6	15·3	..	..	..	·765	·028	·247	·781	·974	·353	·621	·924	·511	·423
89·4	71·3	18·1	86·9	75·0	11·9	..	..	..	·795	·124	·198	·926	1·026	·337	·689	·946	·557	·389
88·5	69·2	19·3	86·0	74·7	11·3	..	..	..	·794	·110	·297	·813	·002	·439	·563	·947	·596	·351
88·1	72·5	15·5	86·1	75·4	10·7	..	..	..	·798	·076	·300	·776	0·977	·425	·552	·933	·625	·308
87·6	70·9	16·7	86·1	73·9	12·2	..	..	..	·792	·125	·221	·894	1·067	·388	·679	·932	·565	·367
88·9	69·0	19·9	86·2	73·3	12·9	..	..	..	·815	·139	·360	·779	·944	·479	·465	·968	·625	·343
88·0	69·7	18·3	85·2	74·2	11·0	..	..	..	·809	·155	·369	·786	·940	·439	·501	·957	·608	·349
88·1	68·3	19·8	85·0	72·3	12·7	..	..	..	·800	·088	·299	·789	·919	·405	·514	·956	·562	·394
88·4	70·6	17·8	85·2	74·4	10·8	..	..	..	·775	·068	·280	·808	0·982	·402	·580	·921	·565	·356
87·8	69·6	18·2	85·8	72·9	12·9	..	..	..	·778	·055	·304	·751	·983	·423	·560	·934	·553	·381
87·9	67·3	20·6	76·0	74·3	11·7	..	..	..	·759	·000	·267	·733	·927	·390	·537	·902	·577	·325
87·6	68·9	18·7	84·4	71·3	13·1	..	..	..	·748	·040	·219	·821	·918	·359	·559	·900	·484	·416
86·5	72·2	14·3	87·8	77·0	10·8	..	..	..	·792	·125	·253	·754	·989	·488	·501	·932	·566	·367
86·3	65·3	21·0	83·7	71·8	10·0	..	..	..	·762	·089	·235	·854	·978	·336	·642	·932	·545	·387
87·4	70·0	17·4	84·7	73·1	11·6	..	..	..	·784	·040	·282	·764	·987	·428	·559	·947	·590	·357
86·9	69·4	16·6	84·5	72·9	11·6	..	..	..	·785	·091	·128	·963	1·023	·335	·688	·953	·583	·370
88·4	72·0	14·2	84·1	75·3	8·8	..	..	..	·787	·082	·272	·789	0·982	·433	·549	·950	·628	·322
86·3	78·9	17·4	83·7	73·4	10·3	..	..	..	·772	·144	·244	·800	·976	·432	·544	·916	·566	·349
89·7	70·6	19·1	85·6	74·9	10·7	..	..	..	·800	·051	·346	·705	·959	·474	·485	·915	·632	·283
88·7	68·1	18·6	84·1	71·7	12·4	..	..	..	·758	·091	·217	·874	·996	·348	·648	·925	·515	·410
87·1	63·4	23·3	84·0	72·1	11·9	84·2	74·7	9·5	·755	·055	·228	·852	1·005	·285	·720	·906	·532	·374
85·8	66·7	19·1	84·2	72·4	11·8	83·8	74·1	9·7	·743	·033	·232	·801	0·964	·253	·711	·892	·513	·379
86·8	66·3	20·5	83·8	72·2	11·6	84·7	75·0	9·7	·780	·031	·215	·816	·973	·321	·652	·911	·515	·396
86·6	71·3	15·3	84·4	74·9	9·5	85·1	75·0	10·1	·751	0·994	·340	·654	·936	·474	·462	·892	·584	·308
87·1	69·9	17·2	84·0	74·4	9·6	85·0	76·0	9·0	·768	·029	·357	·765	·984	·410	·615	·921	·588	·333
87·4	69·6	17·8	85·9	74·1	11·8	85·8	75·6	10·2	·795	·100	·252	·848	·999	·333	·616	·921	·563	·358
87·5	70·6	16·9	82·9	73·1	9·8	84·7	74·1	10·6	·748	0·949	·281	·768	1·009	·400	·609	·909	·552	·357
89·1	67·6	18·5	84·5	73·0	11·5	85·5	75·1	10·4	·767	·036	·262	·773	0·994	·379	·585	·891	·533	·358
88·5	73·5	13·0	85·1	76·1	9·0	86·5	75·3	11·2	·774	·114	·286	·728	·959	·417	·542	·904	·579	·325
88·4	71·7	13·9	83·5	74·9	8·7	85·5	74·8	11·3	·764	·047	·283	·764	1·007	·435	·572	·908	·597	·311
90·3	69·4	16·9	84·2	72·8	11·4	85·1	73·9	11·2	·758	·027	·297	·730	0·963	·388	·575	·921	·595	·326
89·4	68·9	17·5	83·5	71·9	11·6	85·2	73·7	11·5	·736	0·994	·330	·664	·933	·440	·498	·896	·544	·352
87·3	68·7	18·6	84·3	72·3	12·0	85·3	74·4	10·9	·759	·129	·273	·856	1·013	·356	·658	·926	·536	·390
87·4	67·4	20·0	85·9	72·4	11·5	85·4	74·8	10·6	·780	·092	·344	·903	·948	·366	·582	·920	·570	·350
88·8	67·0	18·8	84·2	72·6	11·6	84·9	74·0	10·9	·759	·014	·193	·821	0·958	·303	·655	·882	·574	·308
89·6	71·2	15·4	84·1	74·1	10·0	86·3	75·6	10·7	·794	·067	·357	·710	·977	·412	·565	·931	·618	·313
89·4	72·7	14·7	85·4	74·6	10·8	85·1	74·8	11·3	·787	·060	·329	·721	1·001	·461	·540	·939	·599	·340
88·1	72·1	14·0	83·9	74·1	9·8	84·5	74·7	9·8	·771	·069	·337	·672	0·952	·454	·498	·927	·609	·318
88·8	67·3	19·5	84·9	73·6	11·4	86·3	74·7	11·6	·757	·029	·266	·823	·970	·309	·661	·919	·568	·351
89·0	70·4	18·6	85·7	75·5	10·2	85·7	75·5	10·2	·792	·050	·298	·752	·984	·452	·532	·923	·621	·302
86·0	68·1	17·9	83·6	72·1	11·5	85·3	74·1	11·2	·739	·015	·253	·762	·970	·373	·597	·899	·548	·351
90·1	71·9	14·8	84·0	74·1	9·9	85·6	74·9	10·7	·784	·060	·344	·743	·959	·455	·474	·929	·616	·313
86·6	69·1	17·5	84·1	73·2	10·9	85·8	74·9	10·9	·776	·030	·333	·697	·965	·420	·545	·923	·580	·343
87·4	72·2	15·2	85·8	75·3	10·5	86·7	76·0	10·7	·802	·071	·347	·724	1·003	·465	·538	·948	·628	·320
89·0	68·2	18·7	85·0	73·6	11·4	85·9	74·6	11·3	·781	·104	·291	·823	·007	·398	·602	·932	·582	·370
88·7	71·0	16·0	85·1	74·9	10·5	86·7	75·7	11·0	·791	·115	·315	·798	·022	·387	·635	·931	·580	·351
88·3	67·7	18·6	86·9	72·0	12·9	86·3	75·2	11·1	·775	·028	·218	·810	0·979	·339	·640	·897	·510	·387
87·5	68·4	19·1	85·0	73·2	11·8	86·3	75·4	10·9	·793	·088	·256	·832	1·038	·383	·653	·949	·561	·388
87·4	66·7	20·7	85·7	72·5	13·2	86·3	75·4	10·9	·787	·100	·196	·904	·998	·331	·677	·937	·509	·428
87·7	72·1	15·6	85·9	75·8	10·1	87·4	76·5	10·9	·810	·042	·291	·783	·984	·435	·549	·942	·552	·390
86·2	64·9	21·3	84·5	73·9	10·6	85·5	74·1	11·4	·775	·042	·214	·828	·982	·319	·663	·930	·568	·371
89·7	69·0	17·7	84·7	74·8	9·9	86·7	75·4	11·3	·785	·022	·302	·720	·984	·421	·563	·933	·612	·321
87·0	65·9	22·0	85·4	70·1	15·3	86·0	74·4	11·6	·766	·036	·168	·868	·979	·288	·691	·930	·481	·449
86·5	68·2	18·3	85·0	72·6	12·6	86·1	74·7	11·4	·774	·070	·230	·840	·990	·329	·661	·927	·563	·364
89·0	69·8	17·3	84·6	73·8	10·8	85·9	74·6	11·3	·792	·059	·299	·760	·992	·339	·653	·921	·576	·345
87·9	67·4	19·6	84·0	73·9	10·1	86·0	74·7	11·3	·770	·043	·205	·778	·971	·408	·563	·924	·566	·358
87·2	67·6	19·6	85·2	71·9	13·3	85·9	74·6	11·3	·786	·051	·315	·738	·998	·382	·616	·944	·575	·369
86·0	67·9	18·1	83·9	73·5	10·4	86·4	74·6	11·8	·773	·083	·316	·767	·993	·418	·575	·937	·587	·350
86·8	67·7	19·1	84·7	74·4	10·3	86·7	75·7	11·0	·795	·027	·161	·886	·983	·293	·690	·938	·597	·341
88·4	72·2	16·2	85·4	75·6	9·8	87·3	75·9	11·4	·800	·076	·326	·750	·993	·440	·553	·952	·622	·330
88·0	70·9	17·1	85·5	74·3	11·2	86·2	74·7	11·5	·787	·116	·271	·845	1·050	·406	·644	·943	·588	·355
87·5	70·6	16·9	85·5	74·9	10·6	86·9	75·5	11·4	·798	·085	·200	·885	·013	·392	·621	·955	·616	·340
87·7	69·4	18·3	86·0	73·5	12·5	86·6	75·3	11·3	·804	·089	·299	·793	·029	·387	·642	·951	·570	·381
87·4	67·0	20·4	85·0	73·2	11·8	86·1	75·4	10·7	·809	·093	·195	·898	·028	·347	·681	·949	·558	·391
87·0	70·0	16·1	83·7	74·4	9·3	85·4	75·9	10·5	·789	·053	·274	·779	0·961	·339	·622	·934	·623	·311
86·4	69·3	17·1	83·5	73·9	9·6	86·8	75·4	11·4	·772	·026	·253	·773	·962	·344	·618	·907	·570	·337
88·8	70·6	16·8	84·7	74·1	10·6	86·4	75·3	11·1	·791	·077	·308	·789	·974	·435	·539	·937	·596	·341
86·5	69·4	17·2	84·7	75·5	9·2	87·2	76·1	11·1	·788	·023	·289	·804	1·010	·370	·640	·932	·607	·325

Relative Humidity.												
%	%	%	%	%	%	%	%	%	%	%	%	%
87·8	69·1	18·7	85·6	74·4	11·2	86·9	75·3	11·6	74·2	98	22	76	92·6	47·0	45·6	85·5	63·8	21·9
87·0	70·1	16·9	85·3	74·5	10·8	86·7	75·3	11·4	74·5	95	15	80	92·7	49·2	43·5	85·5	65·9	19·6

and from barograms and thermograms during the period 1873—1922.
minimum thermometers.

TABLE XXI.—METEOROLOGICAL

(Rain

Year.	Jany.	Feby.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.
1	2	3	4	5	6	7	8	9	10	11
	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.
1846	..	..	..	..	..	26·41	33·19	6·65	6·65	1·03
1847	0·09	0·02	..	0·31	1·40	37·56	16·45	8·68	5·68	0·28
1848	..	..	..	0·59	5·67	39·98	13·90	7·37	2·32	5·84
1849	0·34	..	..	..	..	23·41	20·99	12·66	26·13	0·76
1850	..	..	..	..	..	14·80	20·15	5·39	4·77	4·89
1851	..	..	..	..	0·52	24·50	47·02	20·03	3·89	0·04
1852	..	..	0·01	..	0·30	21·76	22·17	11·16	12·67	0·19
1853	..	0·05	0·03	..	..	33·70	13·05	9·55	9·83	..
1854	..	..	..	..	..	16·34	38·85	3·80	13·61	7·49
1855	..	..	..	..	..	20·18	11·83	3·82	5·29	0·06
1856	..	..	..	..	2·09	24·66	24·45	6·73	7·78	0·06
1857	..	..	..	..	0·57	9·26	8·74	15·71	14·21	2·78
1858	..	..	..	0·15	1·57	14·44	20·12	7·48	15·47	3·22
1859	..	..	..	..	..	26·87	28·70	14·59	5·94	1·06
1860	..	..	..	..	0·03	21·97	22·39	7·11	8·15	2·60
1861	..	..	..	..	0·89	15·43	25·34	30·35	3·24	1·86
1862	..	..	..	..	0·01	22·31	15·10	12·55	21·69	1·42
1863	0·41	..	..	0·11	0·07	23·41	30·78	10·00	9·98	2·32
1864	..	..	..	..	0·01	15·42	13·36	10·72	5·69	..
1865	0·38	..	..	..	..	10·61	18·28	38·42	4·86	6·16
1866	..	0·11	..	..	..	13·47	40·34	20·34	3·44	0·74
1867	..	..	..	..	..	8·70	29·39	12·21	6·80	5·07
1868	..	..	0·01	..	..	13·52	20·43	20·29	7·71	0·14
1869	..	..	..	0·03	..	26·22	22·89	16·24	6·56	3·55
1870	..	..	0·03	0·02	..	21·72	26·43	6·27	7·08	4·65
1871	2·22	..	..	..	1·25	8·91	9·96	8·95	6·01	0·25
1872	..	..	..	..	0·06	24·43	24·84	9·49	16·69	1·07
1873	..	0·05	..	..	0·51	20·38	16·98	32·96	7·77	0·01
1874	..	..	..	..	0·05	18·88	41·24	11·14	11·05	0·02
1875	0·47	0·05	..	..	..	23·97	15·14	11·95	31·51	..
1876	..	..	..	..	0·01	12·97	23·69	8·66	4·71	..
1877	0·23	0·51	0·02	..	..	24·01	10·75	10·78	9·69	6·39
1878	0·03	..	..	0·02	0·03	20·49	47·64	20·02	16·90	4·17
1879	..	..	0·03	..	5·23	16·56	11·21	22·26	5·61	0·40
1880	..	0·01	0·02	..	..	21·48	13·73	4·08	22·80	1·18
1881	..	..	0·04	..	0·36	15·29	29·47	19·06	4·56	4·17
1882	..	0·04	0·02	0·08	0·02	27·54	26·94	8·36	16·08	1·12
1883	0·12	..	..	..	0·33	13·66	39·88	12·57	12·37	30·40
1884	0·03	..	..	..	..	13·25	25·87	16·29	17·04	2·22
1885	..	..	..	..	0·02	5·11	21·81	25·42	12·04	3·54
1886	..	..	..	0·01	0·96	43·45	26·79	10·09	6·54	1·69
1887	..	..	..	0·02	0·09	24·07	30·98	17·69	18·23	2·79
1888	1·85	0·02	0·10	..	..	15·76	22·47	11·43	4·92	0·11
1889	..	..	..	..	0·67	19·89	30·45	10·32	2·71	3·80
1890	..	..	..	0·01	0·05	24·55	22·24	10·61	8·45	0·58
1891	..	..	0·20	..	..	13·99	32·48	6·94	22·53	1·04
1892	..	..	..	0·11	13·30	23·86	26·56	18·73	1·89	..
1893	..	0·14	..	0·02	6·30	21·47	16·14	13·55	7·54	0·45
1894	0·22	..	0·06	0·01	..	16·87	26·15	8·40	12·04	3·08
1895	..	0·07	..	..	0·08	17·84	18·04	15·97	11·91	3·62
1896	..	..	..	..	0·26	28·02	36·44	20·77	1·62	0·01
1897	0·01	..	..	..	..	14·40	30·19	13·82	20·80	2·51
1898	..	0·17	..	..	0·16	27·21	20·72	15·98	19·94	0·48
1899	..	..	..	1·57	0·08	20·81	4·72	6·23	3·49	..
1900	..	..	..	..	..	18·26	25·75	17·62	7·49	..
1901	0·74	..	..	0·04	0·01	25·36	32·70	14·27	1·81	0·39
1902	..	..	..	..	..	9·77	10·68	16·53	27·11	0·18
1903	..	..	0·17	..	7·79	19·75	24·82	18·23	7·82	1·91
1904	..	..	0·07	..	0·02	15·10	10·14	5·72	1·81*	0·56
1905	..	0·08	..	..	..	6·53	16·30	4·35	6·16	0·20
1906	..	0·15	..	..	..	12·20	18·10	20·91	3·94	..
1907	..	0·37	..	0·06	..	22·49	59·26	15·93	2·75	0·02
1908	0·10	0·06	0·06	..	..	15·19	21·13	9·67	6·71	0·63
1909	..	..	..	..	..	16·68	31·37	7·82	15·36	..
1910	..	..	..	..	0·03	22·92	7·42	16·89	18·84	0·62
1911	0·06	..	..	..	0·04	10·85	16·89	16·99	2·80	..
1912	..	..	..	..	0·43	10·79	25·77	9·70	3·09	0·65
1913	..	..	..	..	..	25·81	33·58	3·47	5·75	2·35
1914	..	0·06	..	0·07	..	16·69	31·12	12·44	21·03	0·01
1915	..	0·30	0·69	0·06	0·36	40·10	14·88	8·93	10·21	2·55
1916	..	..	..	0·04	0·07	23·55	25·10	17·19	14·89	4·79
1917	..	1·68	..	..	0·88	15·33	12·91	33·27	19·68	16·11
1918	..	..	1·46	..	11·17	40·65	4·21	4·80	3·06	..
1919	0·11	..	..	..	..	23·35	24·49	10·63	8·16	1·49
1920	0·99	0·33	..	..	..	9·16	22·60	4·58	4·05	0·34
1921	..	..	..	..	..	26·79	35·67	10·37	13·13	0·06
1922	..	..	..	..	..	26·63	31·00	5·15	7·43	0·61

*From 1875 maximum fall in one hour is derived from hourly tabulations of pluviograms, All other figures are derived from observations of Newman's rain gauges.

DATA, 1846—1922.

fall).

Nov.[1]	Dec.	Annual Total.	Number of Rainy Days.	Maximum fall in one day.	Time of occurrence.	Maximum fall in one hour.	Time of occurrence.		
12	13.	14	15	16	17	18	19		
Inches.	Inches.	Inches.		Inches.		Inches.	Month.	Day.	Hour.
..	..	73·93	104	5·16	16th July	..	..	..	..
5·53	..	76·00	120	12·84	11th June	4·22	6	12	3 to 4
0·19	..	75·86	96	8·14	14th June	2·20	6	14	22 to 23
0·61	..	114·89	109	6·35	25th July	1·39	7	17	0 to 1
0·25	..	50·25	103	4·61	17th July	1·70	6	13	12 to 13
0·07	..	96·07	89	6·51	25th August	1·90	7	14	13 to 14
..	1·01	69·27	100	7·09	22nd June	1·96	6	21	0 to 1
..	..	62·60	84	9·89	18th June	2·25*	6	9	3 to 4
1·85	..	82·14	114	5·55	14th June	1·42	6	14	7 to 8
..	..	41·18	91	4·79	20th June	1·34	6	26	19 to 20
..	0·12	65·92	109	10·28	9th June	1·77	6	9	9 to 10
..	..	51·27	108	3·27	1st August	1·12	8	1	12 to 14
..	..	62·45	105	6·15	11th September	1·50	7	9	21 to 22
..	..	77·16	91	8·20	12th June	2·16	7	16	21 to 22
..	..	62·15	93	7·31	13th June	1·91	7	16	2 to 3
..	..	76·91	90	6·08	18th August.	2·03	7	14	9 to 10
0·45	..	73·63	107	6·16	21st June	3·00	6	9	17 to 18
..	..	77·68	109	8·14	24th July	1·84	7	24	17 to 18
0·47	..	45·57	95	3·86	26th June	1·07	8	27	1 to 2
1·14	..	77·85	104	7·86	2nd July	1·05	8	14	14 to 15
..	..	73·44	93	7·63	11th July	2·62	8	2	14 to 15
0·13	..	62·30	110	5·41	16th July	1·93	7	5	0 to 1
0·02	..	62·12	107	10·23	9th August	1·00	7	16	12 to 13
0·05	0·12	91·66	102	15·31	27th June	1·11	7	12	18 to 19
..	..	69·21	109	4·71	18th June	1·43	10	13	19 to 20
2·97	0·06	40·58	107	4·64	31st August	1·88	8	31	21 to 22
..	..	76·48	98	9·23	12th September	4·13	9	12	23 to 24
..	..	69·70	101	8·23	24th August	No hourly observations are avail-			
..	..	82·18	103	4·48	July				
..	..	83·09	97	8·14	5th September	1·29*	8	30	15 to 16
..	..	50·04	83	7·39	26th July	1·33	7	26	1 to 2
..	..	69·33	99	14·60	19th June	3·21	6	19	17 to 18
2·63	..	111·93	113	5·65	4th July	1·32	7	3	14 to 15
..	..	61·40	111	3·78	30th July	2·03	6	24	22 to 23
..	..	67·94	109	8·20	2nd July	2·55	7	2	7 to 8
0·09	..	73·04	113	11·30	3rd August	1·61	8	3	9 to 10
0·03	..	69·23	105	10·18	3rd June	2·42	8	3	1 to 2
0·88	..	90·18	123	6·85	13th July	1·66	7	9	16 to 17
0·60	1·14	75·44	110	7·37	13th July	2·06	7	13	21 to 22
..	..	67·91	113	10·23	15th August	3·01	8	15	12 to 13
0·61	..	89·74	110	16·10	16th June	2·69	6	18	8 to 9
1·02	0·16	94·95	112	7·84	10th September	2·06	7	3	4 to 5
1·16	..	57·82	107	4·66	14th July	2·39	9	11	4 to 5
..	..	67·84	103	4·04	8th July	1·18	7	18	11 to 12
1·25	0·13	65·13	116	4·81	10th June	1·29	6	12	12 to 13
..	..	77·18	100	5·82	1st September	1·59	6	23	0 to 1
0·67	..	95·12	114	5·43	31st August	1·85	6	22	3 to 4
1·63	..	67·24	124	4·97	20th June	1·50	6	10	2 to 3
..	0·01	68·85	124	4·77	21st July	1·80	7	9	10 to 11
0·06	..	67·59	109	6·82	7th September	1·42	8	7	6 to 7
0·53	..	87·55	102	6·21	22nd June	2·10	7	4	18 to 19
..	..	81·53	103	4·92	16th July	1·85	6	13	6 to 7
0·13	..	74·09	110	5·12	11th September	1·66	6	13	7 to 8
..	..	35·90	87	6·58	15th June	2·34	6	15	10 to 11
..	..	69·12	91	3·04	31st July	1·53	6	26	7 to 8
..	..	75·32	98	8·55	13th June	2·89	6	19	16 to 17
0·01	0·81	71·97	100	6·74	17th September	1·36	8	20	19 to 20
..	..	84·49	111	6·03	26th August	1·66	5	25	12 to 13
..	..	33·42	90	3·33	11th June	1·20	6	11	7 to 8
1·04	..	33·65	89	4·00	1st July	2·11	6	26	5 to 6
..	..	56·35	93	4·89	28th August	1·38	8	26	11 to 12
..	..	100·78	94	8·84	22nd July	2·91	7	4	0 to 1
..	..	53·54	100	4·30	1st July	1·11	6	22	12 to 13
..	..	71·22	100	4·07	9th July	1·58	6	22	9 to 10
0·14	..	67·86	104	8·14	23rd June	2·69	9	28	19 to 20
0·27	..	46·51	92	4·78	7th July	2·68	7	3	20 to 21
3·62	..	54·05	87	7·88	21st July	2·33	7	21	10 to 11
..	..	70·95	94	5·80	9th July	2·28	7	8	23 to 24
0·18	..	81·82	114	6·28	23rd July	1·65	9	16	0 to 1
0·02	0·07	77·88	100	11·41	23th June	1·85	6	24	22 to 23
0·72	..	86·05	128	7·60	9th June	3·17	6	9	10 to 11
..	..	99·76	134	5·96	30th September	1·65	9	30	13 to 14
0·09	..	38·54	94	4·98	28th May	1·42	6	19	10 to 11
0·18	..	68·35	106	8·74	7th June	1·92	6	7	20 to 21
..	..	41·05	98	5·51	10th June	1·34	7	7	3 to 4
..	..	86·02	101	7·68	19th June	2·51	6	19	10 to 11
..	0·14	70·96	111	6·56	21st July	2·17	6	25	8 to 9

* From 1875 maximum fall in one hour is derived from hourly tabulations of pluviograms. All other figures are derived from observations of Newman's rain-gauge.

	Wind.						Temperature of Ground. Annual Means, In degrees Fahrenheit.				
1846 to 1865.	Annual mean Pressure per sq. ft.	Average Direction.	Absolute maximum Pressure per sq. ft.	Maximum mean daily Pressure per sq. ft.	Maximum mean monthly Pressure per sq. ft.	Velocity of a single gust of wind as recorded by Dines' Anemometer.	1 inch deep.	9 inches deep.	20 inches deep.	60 inches deep.	132 inches deep.
1866 to 1922.	Annual mean Velocity.	Mean Resultant Direction.	Maximum Hourly mean Velocity.	Maximum mean daily Velocity.	Maximum mean monthly Velocity.						
	Lb.		Lb.	Lb.	Lb.						
1846	·44	NW	4·16	1·94	0·65						
1847	·39	NW	3·60	1·63	0·55						
1848	·32	NW	5·28	3·21	0·68						
1849	·25	NW	9·60	2·31	0·54				83·6		
1850	·2	WNW	15·09	1·60	0·37				84·1		
1851	·18	NW	8·00	3·00	0·49				81·6	83·5	
1852	·16	NW	10·79	1·00	0·39				81·7	83·6	
1853	·2	NW	7·00	1·40	0·51				81·7	83·6	
1854	·18	NW	35·00	8·06	0·33				82·2	83·9	
1855	·24	NW	13·00	2·05	0·52				81·7	83·6	
1856	·20	NW	16·00	3·08	0·37				82·0	84·0	
1857	·21	NW	9·60	1·29	0·61				80·9	83·0	
1858	·26	NW	12·00	2·38	0·55				80·8	82·5	
1859	·33	NW	11·25	4·29	1·02				81·2	82·9	
1860	·29	WNW	14·00	2·01	0·48		79·6	81·1	82·2	83·6	
1861	·37	WNW	8·75	2·36	0·71		79·0	81·0	82·2	83·9	
1862	·41	NW	10·75	4·02	0·97		80·3	81·6	84·0	84·2	
1863	·38	WNW	7·75	3·05	0·92		79·5	80·7	83·8	84·0	
1864	·32	*WNW	6·25	1·25	0·62		79·7	80·7	83·2	83·6	
1865	·31	WNW	10·29	1·95	0·51		81·0	82·0	84·2	84·5	
	M. P. H.†		M. P. H.†	M. P. H.†	M. P. H†						
1866	10·6	WNW	43	33·9	16·5		79·3	80·0	82·5	83·3	
1867	9·1	WNW	30	23·5	14·2		79·7	80·1	82·1	83·2	
1868	9·2	WNW	37	29·0	14·6		80·1	80·4	82·2	83·4	
1869	9·1	WNW	43	28·2	15·2		80·8	81·2	82·8	83·7	
1870	8·8	WNW	30	23·1	14·3		80·0	80·6	82·5	83·7	
1871	9·2	WNW	35	23·5	15·6		81·0	81·5	83·0	83·8	
1872	8·9	WNW	34	23·7	14·5		79·8	80·4	82·2	83·1	
1873	9·2	WNW	32	22·0	16·9		80·5	80·4	82·2	83·2	
1874	8·9	WNW	34	26·8	14·4		79·7	79·8	81·6	82·6	
1875	8·9	WNW	33	24·6	15·4		81·0	80·7	82·3	83·1	
1876	9·3	WNW	32	22·5	16·8		81·1	80·9	82·6	83·5	
1877	8·6	WNW	32	24·2	13·7		82·0	81·6	83·0	83·8	
1878	8·6	WNW	35	22·6	11·5		81·9	81·8	83·3	84·0	
1879	9·1	WNW	41	29·0	12·6		80·6	80·3	81·9	82·9	82·6
1880	8·8	WNW	25	22·6	14·4		81·6	80·9	82·5	82·9	82·4
1881	9·0	WNW	29	23·2	15·0		82·3	81·7	83·4	84·2	83·4
1882	8·6	WNW	39	25·1	14·9		81·2	80·9	82·9	83·8	83·3
1883	8·9	WNW	32	23·3	15·0		80·9	80·7	82·6	83·8	83·2
1884	8·9	WNW	26	21·3	13·6		80·8	80·8	82·7	83·4	82·8
1885	9·1	WNW	41	30·1	13·5		81·2	81·2	83·1	83·6	82·7
1886	8·6	WNW	35	25·8	12·4		81·4	81·5	83·6	84·1	83·4
1887	8·8	WNW	32	22·1	15·1		80·8	80·7	82·6	83·4	82·8
1888	8·8	WNW	37	20·0	14·6		82·2	82·0	83·7	84·1	83·1
1889	8·4	WNW	43	29·2	12·6		81·8	81·8	83·7	84·5	83·8
1890	8·9	WNW	28	19·4	15·0		81·4	81·4	83·3	84·0	83·4
1891	8·8	WNW	30	24·2	13·3		81·7	81·5	83·4	84·1	83·5
1892	8·1	W	35	23·2	13·9		81·9	81·9	83·7	84·4	83·6
1893	8·1	WNW	29	22·0	10·7		80·9	80·8	82·9	83·6	82·8
1894	8·0	WNW	31	26·6	12·8		81·6	81·6	83·7	84·4	83·6
1895	8·1	WNW	33	22·5	12·7		81·5	81·6	83·7	84·5	83·5
1896	8·1	WNW	34	26·7	15·0		82·6	82·5	84·3	84·8	84·0
1897	7·8	WNW	27	19·1	11·1	M. P. H.	81·3	81·6	83·9	84·9	84·1
1898	7·8	WNW	26	16·8	11·9	41	82·5	83·5	86·3	86·3	84·6
1899	7·2	WNW	22	15·2	11·5	40	82·2	83·7	86·5	86·8	85·2
1900	7·5	WNW	29	19·6	12·2	49	82·2	83·9	86·8	87·1	86·7
1901	7·6	WNW	31	20·1	11·8	52	82·2	83·7	86·7	87·1	86·6
1902	7·3	WNW	29	21·2	11·2	40	83·3	84·8	87·6	87·8	86·3
1903	7·5	WNW	46	30·9	11·7	60	81·1	82·9	86·0	86·6	85·6
1904	7·5	WNW	23	16·3	11·7	49	82·3	83·8	86·7	86·9	85·4
1905	7·2	WNW	26	29·1	11·1	42	81·5	83·1	86·1	86·5	85·4
1906	7·0	WNW	23	16·2	10·0	49	81·6	83·1	86·1	86·5	85·2
1907	7·4	WNW	29	19·4	12·5	54	82·2	83·7	86·5	86·6	85·4
1908	7·4	WNW	26	21·9	12·3	47	81·3	82·8	86·7	86·1	85·1
1909	7·1	WNW	24	16·3	12·5	46	81·2	82·6	85·5	85·9	84·8
1910	7·1	WNW	23	18·8	9·7	44	81·3	82·6	85·3	85·5	84·4
1911	7·1	WNW	21	16·8	10·8	37	82·0	82·3	84·8	85·0	84·1
1912	6·9	WNW	30	20·3	11·6	48	82·5	‡	84·3	‡	84·4
1913	6·6	WNW	25	16·6	9·3	43	81·2	‡	83·2	83·9	83·6
1914	6·9	WNW	24	16·9	12·5	40	82·0	‡	83·5	84·0	83·3
1915	6·6	WNW	26	16·9	8·8	43	82·1	82·0	84·3	84·6	83·4
1916	6·4	WNW	22	16·3	9·3	47	82·0	82·8	85·4	85·4	83·7
1917	6·8	WNW	29	22·8	9·8	42	81·4	82·6	85·6	85·6	83·8
1918	6·4	WNW	33	13·8	9·5	64	82·2	83·0	85·8	85·6	83·8
1919	6·8	WNW	23	18·0	10·0	46	82·0	83·1	85·9	86·1	84·2
1920	6·7	WNW	31	21·7	10·2	48	82·7	83·5	86·3	86·6	84·8
1921	6·4	WNW	20	13·9	8·1	34	82·2	83·2	85·9	86·0	84·7
1922	7·1	WNW	22	15·2	10·4	36	82·2	83·3	86·9	85·8	84·3

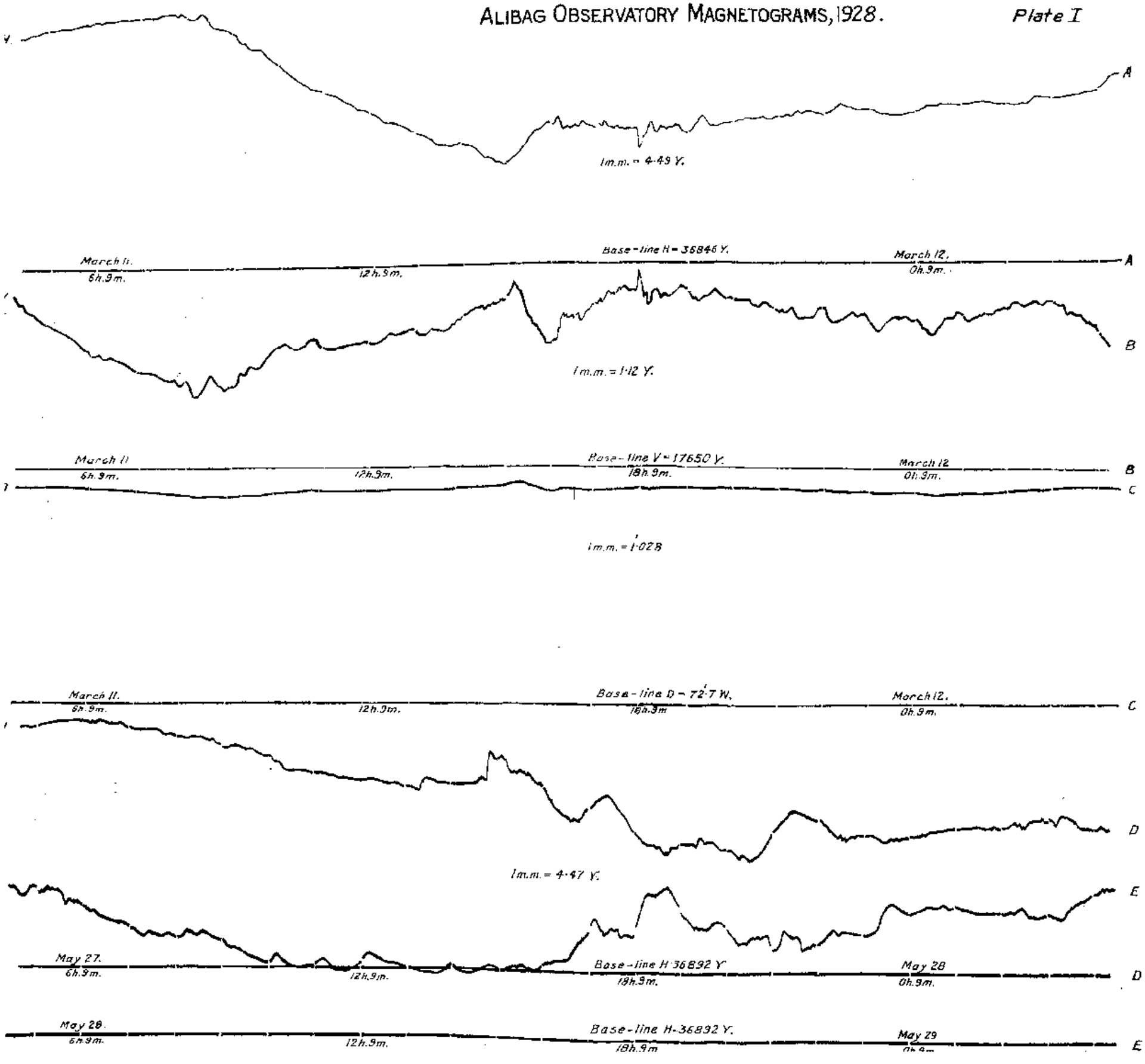
Velocity of single gust by Dines'.

* From the year 1864 the average direction is replaced by resultant direction.
† Velocities by Beckley are reduced by the factor 0·733.
‡ Thermometer broken.

GIPD—498 CPB(P)—12-11-31—900.

ALIBAG OBSERVATORY MAGNETOGRAMS, 1928.

Plate I



ALIBAG OBSERVATORY MAGNETOGRAMS, 1928.

Plate II

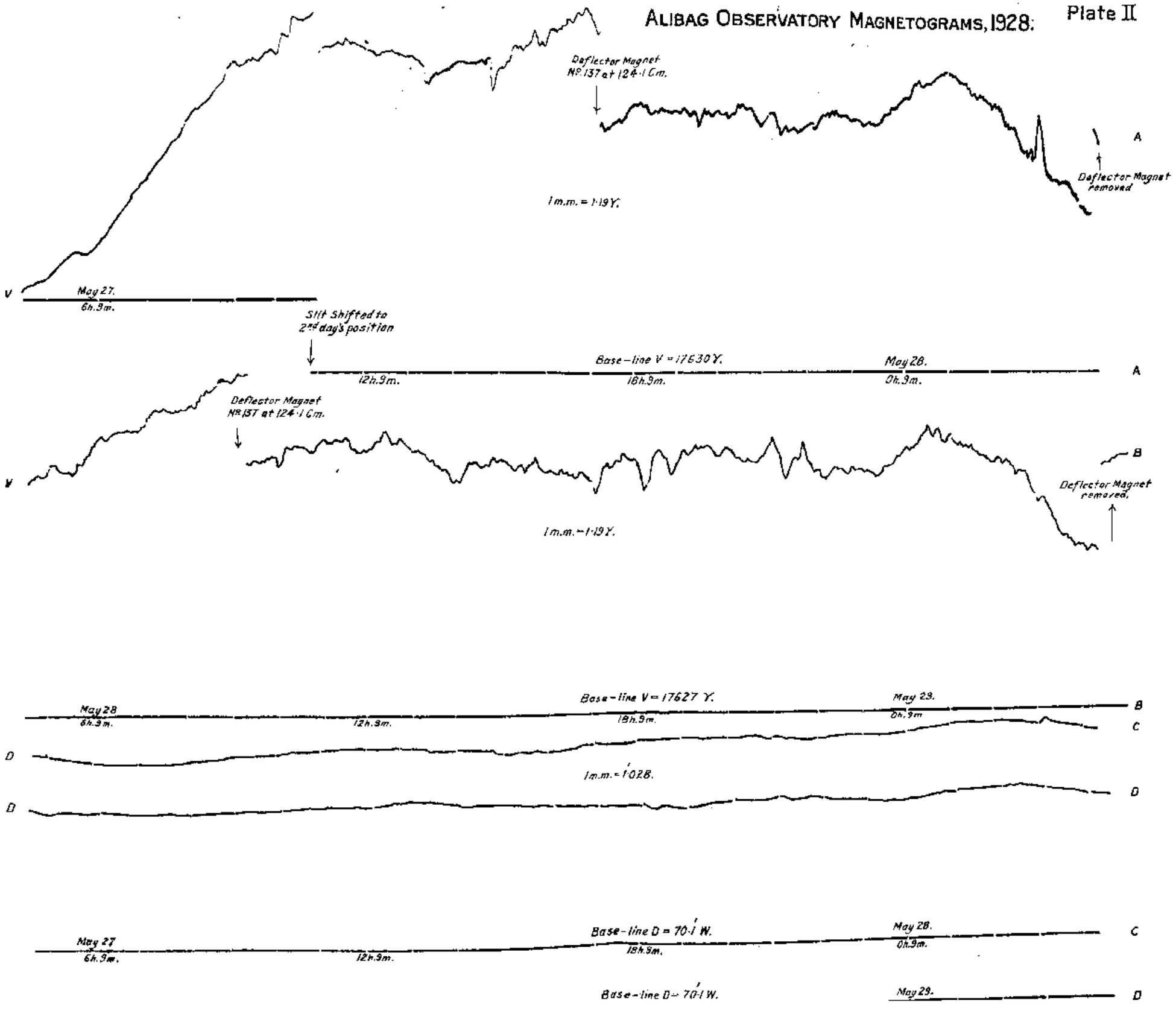
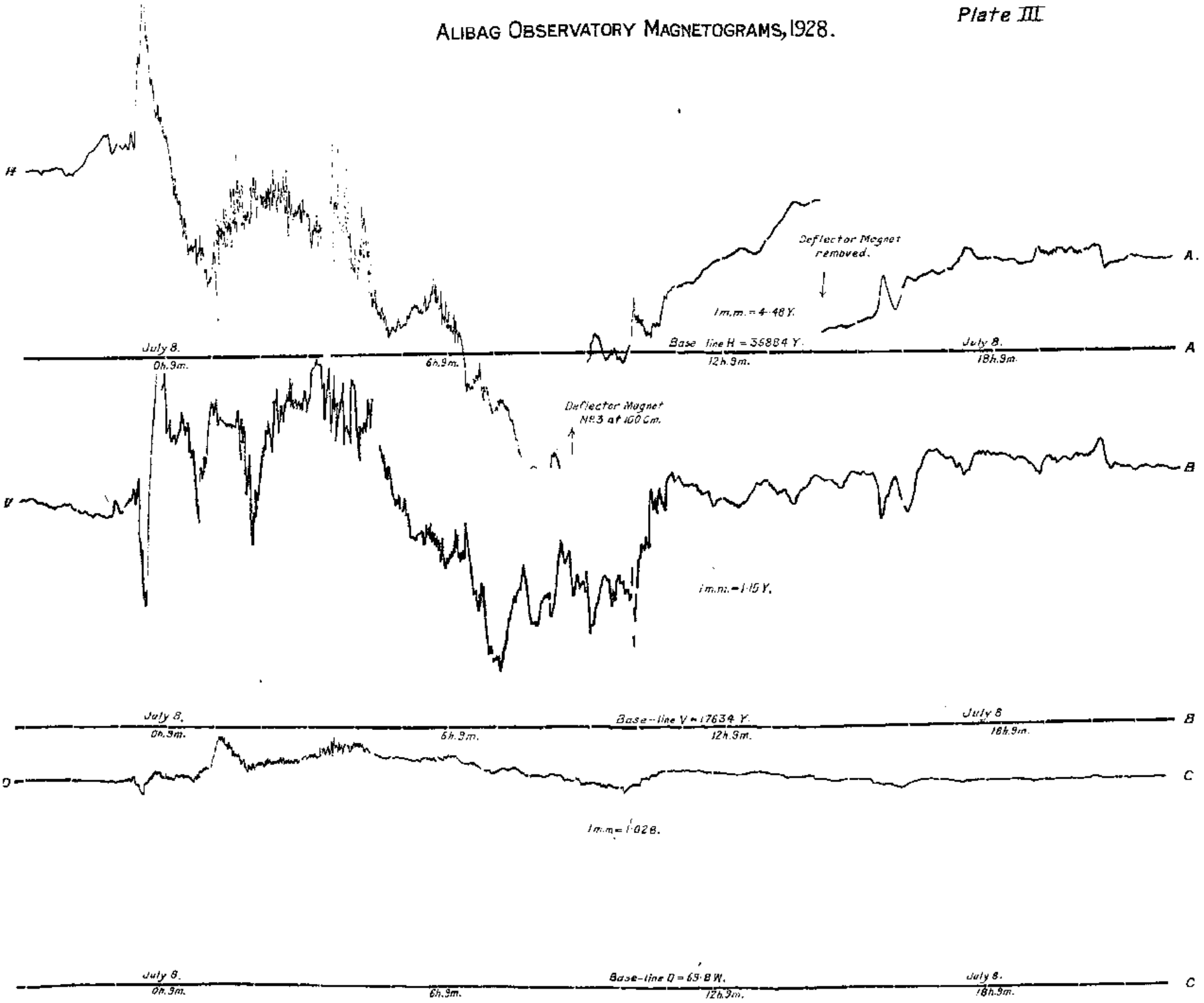


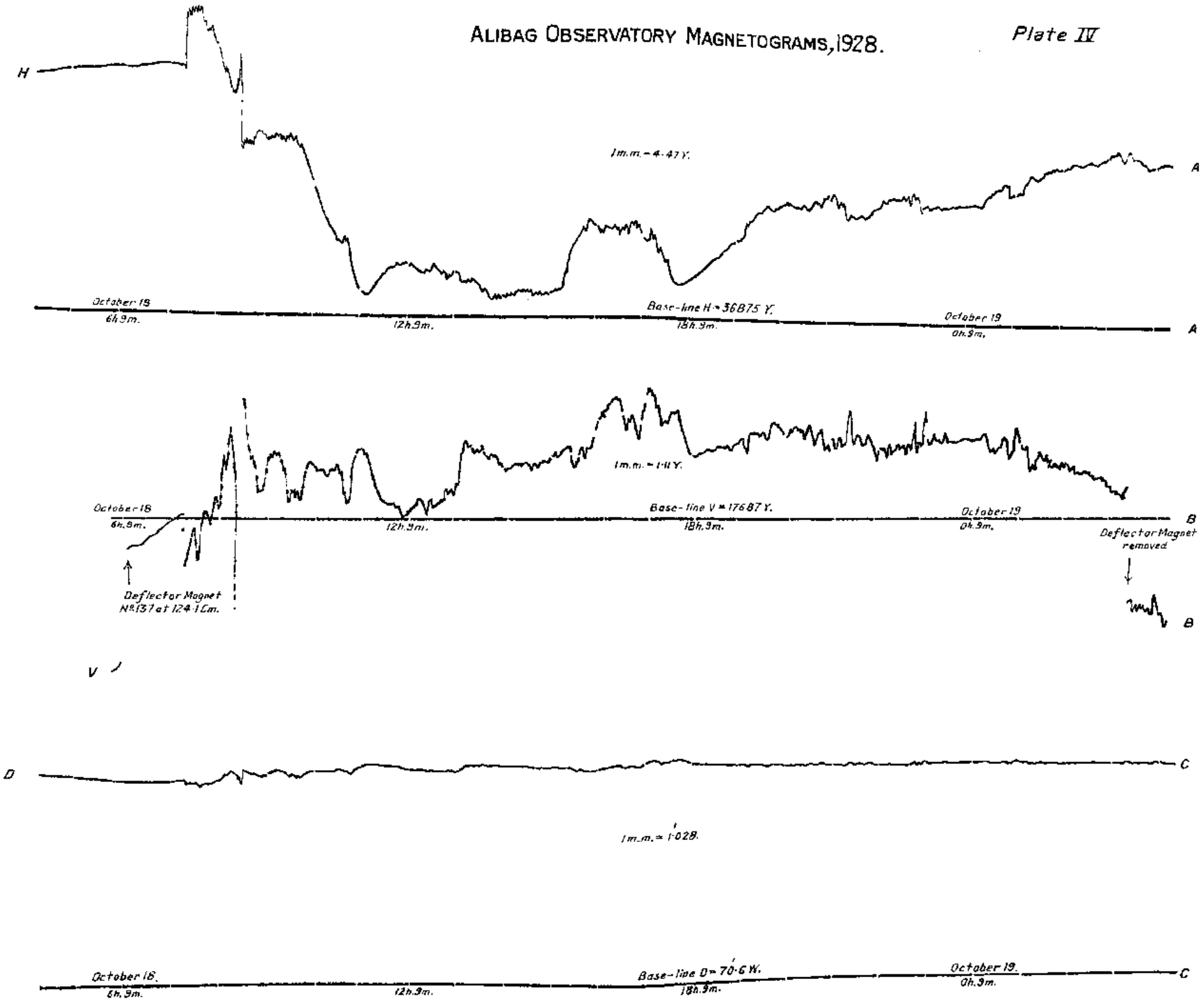
Plate III.

ALIBAG OBSERVATORY MAGNETOGRAMS, 1928.



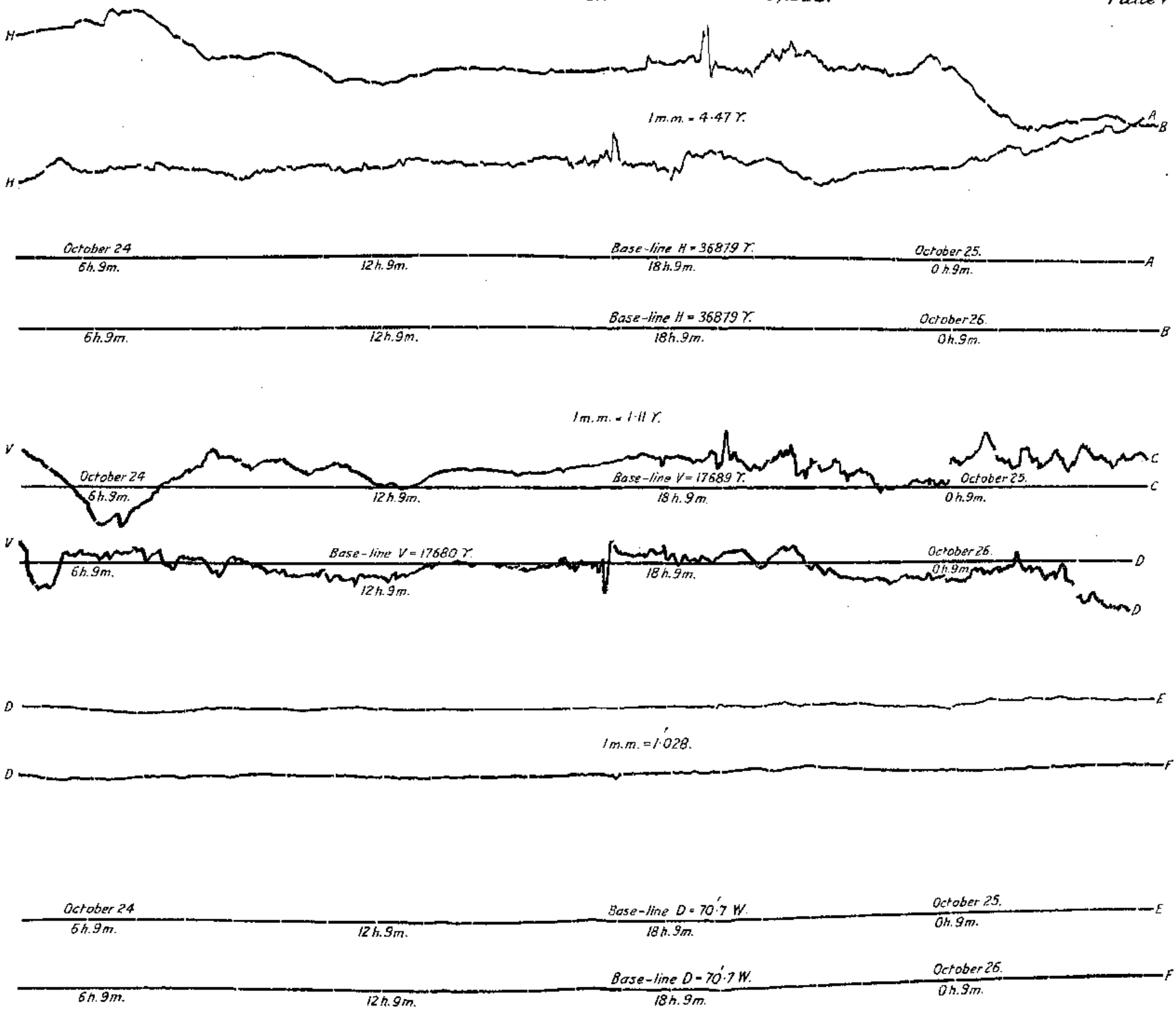
ALIBAG OBSERVATORY MAGNETOGRAMS, 1928.

Plate IV



ALIBAG OBSERVATORY MAGNETOGRAMS, 1928.

Plate V



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